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SARCOXIE NURSERIES  
PEONY FIELDS

WILD BROS. NURSERY COMPANY  
SARCOXIE, MISSOURI





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# A NEW PLAN

## We Will Pay You to Keep This Catalog

We are convinced that our customers do not want a new catalog each year just simply because it is new, but will welcome a comprehensively illustrated book that can be kept for its worth, and as a descriptive guide for simpler price lists sent from season to season.

Therefore we ask you to preserve this book, look it over carefully and pin the coupons to your orders. Each will count the same as 25c in cash on an order for \$5.00 or more accompanied by remittance, or 15c on a cash order for \$2.50 to \$5.00.

CONDITIONS:—Write on the back of the coupon the name and address of some one you think may be interested in fruits, trees or flowers. Please try to send the names of persons not now receiving our catalog. Only one registered coupon will be received from a customer each fall and spring.

### WILD BROS. NURSERY CO.

SARCOXIE, MISSOURI

#### COUPON

Fall 1918

Good as Per Conditions on  
Form 171.

Write on the back the name and address of some one who may be interested in fruits, trees or flowers and pin to your order.

Registered

No. **13395 D**

Wild Bros. Nursery Co.,  
Sarcoxie, Mo.

#### COUPON

Spring 1918

Good as Per Conditions on  
Form 171.

Write on the back the name and address of some one who may be interested in fruits, trees or flowers and pin to your order.

Registered

No. **13395 C**

Wild Bros. Nursery Co.,  
Sarcoxie, Mo.

#### COUPON

Fall 1917

Good as Per Conditions on  
Form 171.

Write on the back the name and address of some one who may be interested in fruits, trees or flowers and pin to your order.

Registered

No. **13395 B**

Wild Bros. Nursery Co.,  
Sarcoxie, Mo.

#### COUPON

Spring 1917

Good as Per Conditions on  
Form 171.

Write on the back the name and address of some one who may be interested in fruits, trees or flowers and pin to your order.

Registered

No. **13395 A**

Wild Bros. Nursery Co.,  
Sarcoxie, Mo.



MAR 6-1917

INDEXED

# FRUITS, TREES AND FLOWERS

## SARCOXIE NURSERIES PEONY FIELDS

WILD BROS. NURSERY COMPANY  
Sarcoxie, Missouri



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# Introductory



**T**HIS catalog has been prepared with the intention of giving you brief, yet dependable descriptions, and illustrations from photographs showing the results that may be attained. We are located on the western slope of the Ozark Mountain range. Our stock is carefully selected and grown under conditions which produce a healthy, vigorous tree, adapted to North, South, East and West. Packing is done under cover in a brick packing and cool storage building, by experienced packers, and in a thorough manner, so that we ship long distances with perfect safety. It is our constant endeavor to give you your money's worth in good stock, well grown and well packed. When purchasing of us you deal direct with the nursery and pay no agent's commissions, as we employ no agents. On this basis we solicit your business.

## [HOW TO ORDER

Just make a list of what you want, giving number, size and price. Tell us whether to ship by freight or express, or to use our judgment. Nursery stock takes a special express rate, 25 per cent less than merchandise rates, and we recommend express for light shipments. If you wish shipment at some special date, tell us. If they can be conveniently obtained, remit by Money Order or Bank Draft. Goods will be sent C. O. D. when half the amount is sent with order. Stock ordered reserved for future shipment should be accompanied by one-third the amount, balance at shipping time. The freight or express charges are borne by the purchaser, who then knows he is paying only the railroad's charge for transportation. In case of shortage or error of any kind, please report promptly on receipt of goods, while the details are fresh in mind and adjustment easier.

**Write name and postoffice plainly; if freight or express office is different from postoffice, tell us.**

## GRADING

We grade carefully, in some cases by caliper (or diameter), in others by height. When by both, caliper governs and the height stated is approximate. It is impossible to grade all varieties to a uniform size by both caliper and height, as some naturally grow tall while others are shorter and heavier. Caliper is considered the best measure of value of the larger sizes. The lower number is included, the higher excluded. For example, 4 to 5 feet includes those trees ranging in size from 4 up to 5 feet.

## ABOUT SUBSTITUTION

When this catalog is printed we are prepared to accept orders for all varieties quoted, but as it is impossible to foresee the demand, some varieties become exhausted, particularly late in season. Often customers prefer that a similar variety be sent rather than lose a year in planting. If you do not wish us to do so, write "No Substitution" on order. We prefer that you tell us, otherwise we are obliged to use our judgment. Substitution, as we use the word, means simply that one variety is sent in place of another, correctly labeled with the name of the variety sent. For example, if Mayflower peach was sent in place of Alexander, it would be labeled Mayflower.

**Reference**—State Bank of Sarcoxie, Sarcoxie, Missouri.

**Inspection**—Certificate of inspection on shipping tag with each shipment.

**Fumigation**—Will be done when requested, or when your state requires it.

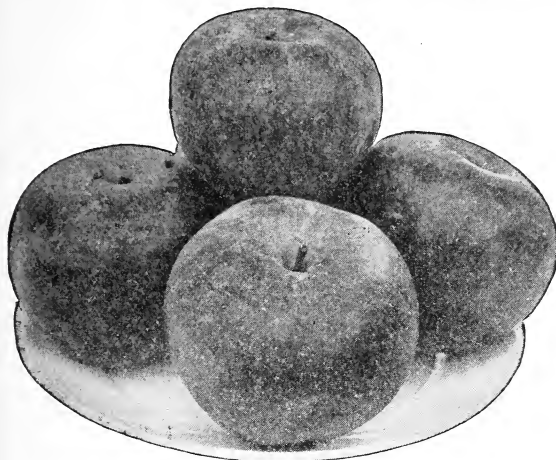
**Guarantee**—While we exercise great care and diligence to have our varieties true to label, and hold ourselves in readiness, on proper proof, to replace any that may prove otherwise, without charge, or refund the amount paid for same, it is mutually understood and agreed between the purchaser and ourselves that this covers the full extent of our guarantee or responsibility.

There are so many conditions over which we have no control—many of which no one can control—that it is impossible to guarantee stock to live, success or failure depending largely on climatic conditions, planting, after care, etc. Occasionally we learn of nurseries that do, but it will be found that the prices more than cover the risk run.

**Spring 1917.**



## Great Orchard Opportunities



Don't think for a minute that this is a story of somebody a long ways off who made a lot of money in a short time from an orchard. Lots of men have done such things, but the great orchard opportunity for the average man is right at home. That's why so many fail to see it. They look too far away. Have you as much as a quarter or half acre of land that you can use—an acre will be better? If you have this land and fail to have all the apples you want to eat every day in the year, and plenty of other fruit in season, then you are missing one of the greatest orchard opportunities.

The most satisfactory orchard is not always a large one by any means. Maybe it is only five or six trees, but anywhere from 20 to 50

makes one that will supply any family, no matter how large, and will give enough of a surplus to prove that profit may be made from a larger planting. If trees of any sort will grow on your land then you can have an orchard.—The Fruit Grower, Nov. 15, 1916.

"From the fact that the production of apples is decreasing and the price going up, there is no doubt at all that the apple business is not overdone, and that there is a very bright future for the apple business, provided those who grow apples will follow approved methods and use their brains as well as their hands," says another issue in reply to an inquiry as to the future of the apple business.

On pages 44-48 condensed planting and pruning instructions are given. Horticultural books and papers give a wealth of information. A spraying outfit costs little for the family orchard and yields big return in better fruit at better prices. The Missouri Experiment Station, in a series of experiments, showed an average net profit of \$143.03 more per acre on sprayed trees than on these not sprayed. Yet in spite of this some say it don't pay to grow fruit and are cutting down their orchards. That's the time it pays the fellow who stays with it.

A good planting distance for apples is 30x30 ft., 48 trees per acre. The ripening dates named below are the approximate average here. Allow 5 to 7 days for each 100 miles North or South. The altitude will also affect the date of ripening.

### PRICE OF TWO YEAR APPLE

	Each	Per 10	Per 100
XX size about 4½ ft. and up 11-16 in. cal. and up, branched.....	\$0.25	\$2.25	\$20.00
Extra size, about 4 to 5 ft., 5-8 in. cal. and up, branched.....	.20	1.75	16.00
Standard size, about 3½ to 4½ ft., ½ to 5-8 in. cal., branched.....	.15	1.40	12.50
Medium size, 3 to 4 ft., more or less branched.....	.12	1.00	7.50
Light size, 2 to 3 ft., little if any branched.....	.10	.50	4.50

Five of a variety at 10 rate, less at each rate; 50, not less than 10 of a variety, at 100 rate. One year quoted by mail on request.

### SUMMER APPLES.

**Benoni**—Fine dessert apple; deep red on rich yellow in broken strips; flesh yellow, crisp, fine grained, tender, juicy, pleasant mild subacid, good; bears profusely and rather young; early to mid-July.

**Duchess of Oldenburg**—Excellent for cooking and market; good size; yellow, almost covered with red stripes; flesh rather firm, crisp, tender, juicy, aromatic, rather acid, good; July 15-August; very hardy, and a young, reliable bearer.

**Early Harvest**—Bright straw, sometimes with a blush; crisp, tender, juicy, rich subacid; very early, June 20-July; productive, bears young.

**Livland Raspberry**—Waxy white striped and shaded light crimson; crisp, fine grained, juicy, fine quality; a young abundant bearer; very hardy; about with or a little later than Yellow Transparent.

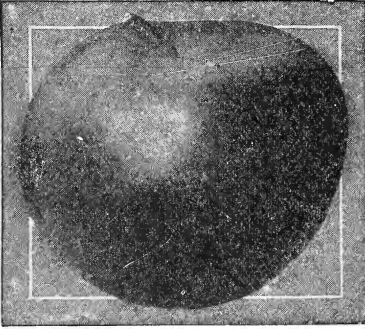
**Red June**—A young, abundant bearer of very red apples; flesh white, tender, juicy, brisk subacid; good; medium size; June-July.

**Sweet June**—Yellow; very sweet, rich and of good quality; productive.

**Yellow Transparent**—One of the best extra early apples; good for eating and excellent for cooking; good size; yellowish-white; fine grained; crisp, juicy, sprightly subacid; mid-June, some earlier than Early Harvest; hardy; a very young, regular, abundant bearer.



## APPLES—Continued



### AUTUMN APPLES

**Malden Blush**—Large, clear yellow with a crimson cheek; flesh tender, fine grained, moderately crisp, very juicy, subacid; an excellent cooking and drying apple; hardy, productive, bears rather young.

**Wealthy**—Above medium to large; prevailing color bright red; flesh moderately fine, crisp, tender, very juicy, subacid, somewhat aromatic, very good; Sept-Oct.; very vigorous, hardy, productive.

### WINTER APPLES

**Arkansas**—See Mammoth Black Twig.

**Arkansas Black**—Medium large; lively deep red, becoming almost black; flesh yellow, firm, crisp, moderately juicy, subacid; December-March; unproductive on some soils; brings a good price when it can be grown.

**Ben Davis**—We are growing Gano and Reagan instead, as they are a better color.

**Delicious**—Roundish conic, sometimes indistinctly ribbed; medium large; pale yellow, mostly covered with red, splashed and striped dark carmine; moderately fine grained; juicy, mild subacid.

	Each	Per 10	Per 100
XX size, 2-year.....	\$0.30	\$2.80	\$25.00
Extra size, 2-year.....	.25	2.00	20.00
Standard size, 2-year...	.20	1.75	15.00
Medium size, 2-year....	.15	1.50	10.00
Light size, 2-year.....	.10	.80	7.50

Above prices apply to Delicious only; all other varieties of apples quoted on page 3.

**Gano**—Large, attractive, rich red to maroon, rarely striped; flesh firm, moderately tender, crisp, juicy, mild subacid; ships well, keeps well, bears young, regularly and abundantly; profitable; of the Ben Davis type but more highly colored.

**Grimes Golden**—Of best quality and a most beautiful yellow; medium to large; flesh yellow, firm, tender, crisp, juicy, rich subacid, aromatic, with a flavor all its own; a fine dessert apple, good for cooking even before it is ripe, and especially fine canned; Oct-Dec.; blooms late; hardy, bears young, and annually if not allowed to overbear.

**Ingram**—A very late keeping apple; yellow, almost covered with bright red stripes; very firm, crisp, juicy, very mild subacid, good; blooms late, bears young; good size if not allowed to overbear; a seedling of Geneton but much more highly colored.

**Jonathan**—A very attractive lively deep red; highly flavored and excellent for dessert, cooking and market; medium size unless thinned; flesh firm, moderately fine, crisp, tender, juicy, very aromatic, sprightly subacid; very good to best; October and later; bears rather young.

**Mammoth Black Twig**—A large, late keeping apple; greenish, largely overspread with dull deep red, on some soils almost black; flesh tender, very firm, moderately fine grained, moderately juicy, subacid, crisp, good.

**Reagan**—Also known as Black Ben Davis. Large, attractive rich red to maroon, rarely striped; firm, moderately crisp, juicy, mild subacid; ships well, keeps well, bears young, regularly and abundantly; profitable; of the Ben Davis type and season but more highly colored.

**Stayman Winesap**—Large, attractive shape; greenish, becoming yellowish splashed and striped, often nearly covered with dark red; very firm, moderately fine grained, tender, moderately crisp, juicy, sprightly subacid, good to very good; keeps late, bears young. While less brilliant than the old Winesap, it is larger, and adapted to a larger range of soil and climate.

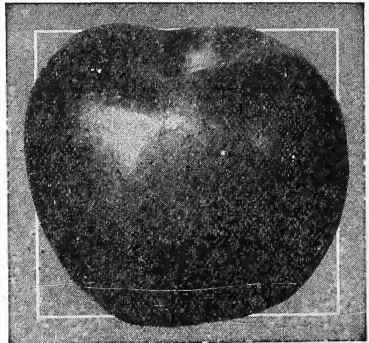
**Winesap**—Bright deep red; flesh yellow, very rich, firm, moderately crisp, very juicy, sprightly subacid; very good; Dec-March; bears young and regularly; excellent on rather light rich deep soil, not adapted to heavy clays.

**York Imperial**—Large, attractive, greenish-yellow shaded red and crimson; firm, crisp, moderately juicy, subacid becoming mild, somewhat aromatic, good; December; bears heavily and rather young; best on heavy soil, seldom does well on light soil.

### CRAB APPLES

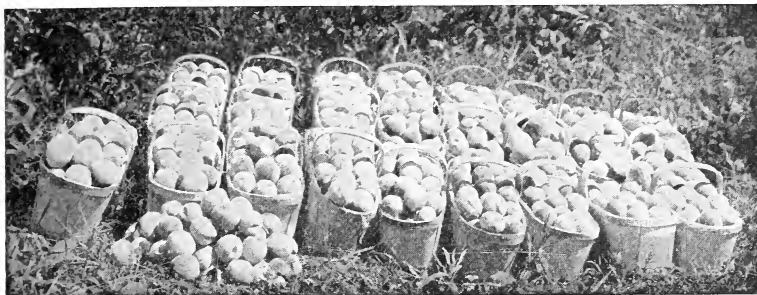
**Transcendent**—Large for a crab, golden yellow with rich crimson cheek; crisp, juicy, subacid; hardy, productive; Aug.-Sept.

**Yellow Siberian**—About three-fourths to one inch in diameter; much used for preserving whole; bears heavily and rather young.



Stayman Winesap Bears Young.

## Peaches



Peaches offer great opportunities to those who take care of their trees.

**T**O the man who will cultivate, prune and take care of his trees, Peaches offer great opportunities for good profits and quick returns, often coming into bearing the third year. A Southern Missouri orchard three and four years old produced 65 cars on 110 acres. A Northern Arkansas orchard cleared \$100 per acre on four-year Elbertas. Subsequent crops naturally are larger and yields of several hundred dollars per acre are not uncommon. This is readily seen when you remember that 16x16 feet requires 170 trees, 18x18 feet, 134 trees per acre. With proper care an orchard should be good for 10 to 15 years. If you have a choice of location give them a northern slope. A sandy loam or gravelly soil is best, but the Peach will adapt itself to any well-drained soil.

### Price of one-year Peach:

	Each	Per 10	Per 100
XX size, 5-8 in. cal. and up, about 4½ ft. and up.....	\$0.25	\$2.00	\$16.00
Extra size, 9-16 to 11-16 in. cal., about 4 to 5 ft.....	.20	1.75	14.00
Standard size, 7-16 to 9-16 in. cal., about 3½ to 4½ ft.....	.15	1.40	12.50
Medium size, 3 to 4 ft.....	.13	1.00	7.00

Five of a kind at 10 rate, less at each rate; 50 at the 100 rate.

The following list is arranged approximately in order of ripening. The dates named is the approximate average in this section:

**Mayflower**—The earliest, about June 10 here; red all over; firm, of good size and shape; semi-cling; good quality for an early peach; hardy, productive, bears young.

**Greensboro**—Large, creamy white with a yellowish cast, colored beautifully with crimson; flesh white, very juicy, excellent for an early peach, semi-cling; mid-June; hardy, profuse bearer.

**Carman**—Large, creamy white splashed red; flesh white, juicy, rich, sweet, very good; nearly a freestone; hardy, productive.

**Champion**—Large, white with beautiful red cheek; flesh white, sweet, juicy, rich, delicious; freestone; early August; one of the hardiest, vigorous, bears young; profitable.

**Belle of Georgia**—Very large, white with red cheek; flesh white, fine texture, firm, juicy, rich, high quality; freestone; early August; strong, vigorous, hardy, very productive; a good shipper; sometimes called the White Elberta.

**Crawford Early**—Very large, yellow with a deep crimson cheek; flesh yellow, rich, slightly sub-acid; freestone; early August.

**Elberta**—Very large, golden yellow with crimson cheek; flesh rich yellow, firm, juicy, good; freestone; mid-August. Excellent for shipping; vigorous, very productive, profitable.

**Crosby**—Orange yellow splashed red; medium size, but very hardy and productive; flesh yellow, juicy, sweet, rich, freestone; seed small.

**Oldmixon Cling**—Large, creamy white, red cheek; flesh white, red at the pit; juicy, sweet, rich fine flavor; latter August; prolific.

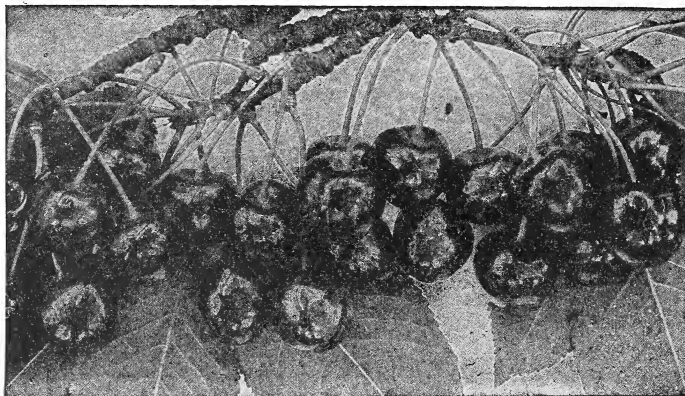
**Crawford Late**—Very large, yellow with a deep red cheek; flesh yellow, juicy, rich, freestone; latter August-September.

**Stump**—Large, white with red cheek; flesh white, juicy, excellent; freestone; latter August-September.

**Heath Cling**—Very large, creamy white, sometimes faintly blushed; flesh white to the pit, rich, very juicy, fine; latter September.

**Salway**—Large, yellow with a red cheek; flesh yellow, firm, juicy, sweet, good; freestone; latter Sept. to early October; a good shipper.





**Early Richmond Cherry is very productive.**

## Made Good With Cherries

Edith L. Ragsdale of Illinois says that in 13 years' experience with cherries their average returns have been around \$200 per acre and at times they have cleared more. In that time they have had one crop failure and one light crop. And this from an orchard bought from a man who declared there was nothing in cherries!

Crops of commercial value may be secured in 4 or 5 years. One of the hardiest trees; if given a chance cherries will almost always repay the grower. Cherry growing requires less expert attention and less detail work than almost any other fruit. The inexperienced fruit growers will find it his "best bet" among tree fruits, as there is almost always a local demand and if one grows a surplus a shipping trade can be worked up.

On well drained soil cherries are successful and are long-lived. They will not succeed on wet soil. Dyehouse, Early Richmond, English Morello and Montmorency belong to the sour class and succeed almost anywhere. Sweet cherries succeed only in a limited territory. Our cherries are budded on Mahaleb stocks which do not throw up sprouts from the roots. Set 18 or 20 feet apart, requiring 134 or 109 trees per acre respectively. Plant early for best results.

### Price of Cherry:

	Each	Per 10	Per 100
XXX size, 2-yr., $\frac{3}{4}$ -in. caliper up, 5 to 6 ft., branched.....	\$0.50	\$4.50	\$40.00
XX size, 2-yr., 4 ft. and up, 5-8-in. caliper, branched. ....	.40	3.30	28.00
Extra size, 2-yr., 3 to 4 ft., $\frac{1}{2}$ to 9-16-in. caliper, branched. ....	.30	2.50	22.00

Five of a kind at 10 rate; less at each rate; 50 at the 100 rate.

**Dyehouse**—A few days before Early Richmond; light red; a productive, reliable bearer; May.

**Early Richmond**—Medium size, round, bright red, darker when full ripe; very juicy, sprightly acid; ripens early, hangs well on the tree; latter May-June; hardy, very productive, succeeds everywhere.

**Montmorency**—Rather large, dark rich red; juicy, pleasant acid; excellent; a week later than

Early Richmond; vigorous, hardy, very productive, succeeds everywhere.

**Royal Duke**—A half-sweet cherry; very large, rich, juicy, deep red, mid to latter June; the nearest sweet cherry that succeeds here.

**English Morello**—Large, dark red, becoming almost black; flesh dark purplish crimson; firm, juicy, rich acid; prolific; latter June-July; dwarfish.

## Pears

**F**OR delicacy, for melting, buttery, juicy texture, and rich, sweet, mild flavor Pears are unsurpassed. The home orchard is incomplete without them and they are a profitable commercial crop in almost all parts of the country. Plant 18 to 20 feet apart (see also page 43). The quality of Pears is much improved if gathered when they have attained full size and begin to color but before they become soft and ripened in a cool, dark room.

### Price of Pear (Bartlett 5c each higher):

	Each	Per 10	Per 100
XX size, 5-8 to $\frac{3}{4}$ inch caliper, 4 to 6 feet.....	\$0.30	\$2.50	\$22.00
Extra size, $\frac{1}{2}$ to 5-8-inch caliper, 4 to 5 feet.....	.25	2.00	18.00

Five of a kind at 10 rate, less at each rate; 50 at the 100 rate.



## PEARS—Continued

Pears are graded by caliper or diameter. The height is the approximate average and varies with the habit of the tree. Arranged approximately in order of ripening. Dates named are average dates here.

**Clapp's Favorite**—Large, yellow dotted and shaded red on sunny side; juicy, melting, perfumed; latter July-August; gather early.

**Bartlett**—Large, waxy yellow blushed on sunny side; juicy, fine grained, buttery, rich; latter August, bears young; productive.

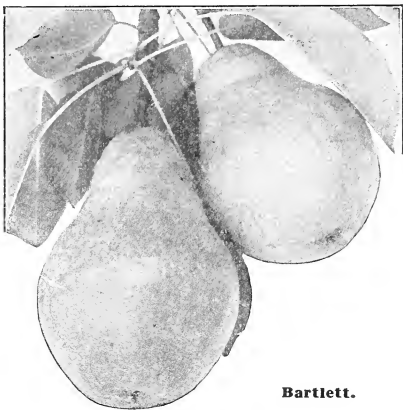
**Seckel**—Small but the richest and highest flavored pear known; brownish-green becoming yellowish brown; fine grained, sweet, very juicy, buttery; early September.

**Garber**—Large, waxy yellow; red cheek; early September; good for canning and market and for pollenizing Kieffer and others; hardy, vigorous; especially resistant to blight.

**Anjou**—Large, greenish yellow, russet and red cheek; fine grained, melting, buttery, rich flavor; latter September; productive; keeps well.

**Duchess d'Angouleme**—Very large, greenish yellow, russet patched and dull red cheek; juicy, melting, slightly granular; September-October; productive, hardy, vigorous.

**Kieffer**—Large to very large, attractive rich yellow tinted red; very juicy, usually slightly coarse; if picked when mature but before fully ripe and ripened slowly in a cool dark room it develops good flavor; very resistant to blight, hardy, very productive, ships well, and a profitable pear; September-November; bears about the fifth year; plant Garber to pollenize it.



**Bartlett.**

### DWARF PEARS

**Dwarf Pear**, propagated by budding on quince, occupy little room, are valuable where space is limited, and while not so long lived as Standards begin bearing younger, often the year after planting. If set 4 to 6 inches deeper than in the nursery they finally become half-standards, increasing their length of life. They may be planted quite close—10 to 12 feet, and kept headed back.

**Duchess d'Angouleme**—XX, 5-8 to 11-16 in. caliper, 25c each, \$2 per 10, \$16 per 100.

## Plums

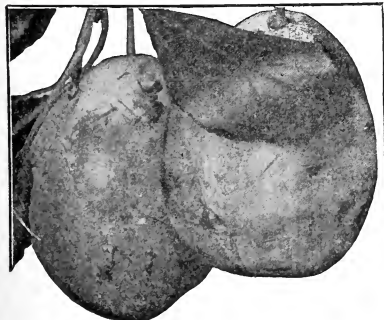
Plums are so easily grown, thrive so well with little care and even in spite of neglect, and respond so liberally to good care that they should find a place in every home orchard. They succeed in almost any soil, and are often planted in the chicken yard and out-of-the-way corners when other space is not available. Plant 18 to 20 ft. apart. Further information is given on page 44.

### Prices of Plums:

	Each	Per 10	Per 100
Extra size, 5-8 to $\frac{3}{4}$ inch caliper, about $4\frac{1}{2}$ ft. and up, branched.....	\$0.30	\$2.50	\$22.00
Standard size, $\frac{1}{2}$ to 5-8 inch caliper, about $3\frac{1}{2}$ to $4\frac{1}{2}$ ft., branched....	.25	2.00	18.00

Five of a kind at the 10 rate, less at each rate; 50 at the 100 rate.

Arranged approximately in order of ripening; dates named are average dates here.



**Red June**—Japan. Dark coppery red with a bluish bloom; medium size; flesh yellow, juicy, sweet, semi-cling; early; hardy, productive.

**Wild Goose**—Medium to large, oval, bright red with many white dots, thin bluish bloom; cling; sweet, juicy; vigorous, spreading growth. X size Wild Goose are graded 9-16 in. cal. up; Std. 7-16 to 9-16.

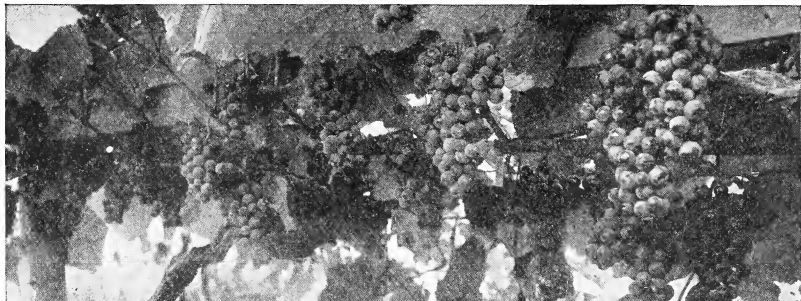
**Abundance**—Japan. Medium to large, bright red almost entirely overlaying a yellow ground; juicy, sweet, rich, good; cling; strong, upright growth, hardy, very productive; bears young.

**Burbank**—Japan. Large to very large, bright dark red on yellow ground; flesh yellow, firm, juicy, rich, sugary; cling; latter July; very strong, spreading growth; a young profuse bearer, requires thinning.

**Shipper's Pride**—European. Large, nearly round, dark purple or blue; firm, good, early Sept.

**Shropshire Damson**—European. Large for a Damson; dark blue; cling; flesh greenish; esteemed for preserving; latter September; vigorous, very productive.

**Wickson**—Japan. Large, heart shaped; dark red, thick bluish bloom; flesh yellow, solid, meaty, sweet, cling; growth upright.



## Grapes Bear After Freezing

**S**INCE living in Kansas I have several times seen the new growth on our grape vines killed by frost; but found that, where grapes had been kept well pruned and cultivated, they possessed sufficient latent force, owing to their widespread root growth,\* to push out new shoots from otherwise dormant buds. \* \* \* You will find, when your grape vines are frozen, even as late as the first of May, that, if all green matter is frozen dead, then otherwise dormant buds will break and the new growth from them will come right on and produce new shoots from which a fair crop of grapes will grow; but if a single joint of the first crop of shoots is left, the new growth will start from the green bud on such shoots, and the resultant growth will not produce any grapes, but will produce a shoot with leaves only. So if the new growth is not frozen back to the previous year's wood it should at once be pulled off, thus forcing the latent buds to start.—Wm. H. Barnes, before the Kansas State Horticultural Society.

Grapes come into bearing quickly, often yielding some the second year after planting. A gravelly soil of average fertility, preferably a southern exposure, is best, but for the home vineyard they may be planted at almost any convenient place. Steep hillsides may be made very profitable. Set 8x8 feet requires 680 per acre. Planting and pruning instructions will be found on page 45.

**Agawam**—One of the best red grapes; bunch large, berry large, dark reddish brown; flesh tender, juicy, rich; ripens after Concord; vigorous, hardy, productive.

**Campbell's Early**—Large, black; flesh tender, rich, sweet, high quality; adheres strongly to the stem and a fine shipping grape; very early; growth strong; bears profusely.

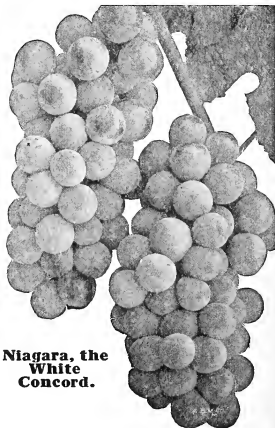
**Concord**—The most popular; large, black with rich blue bloom; juicy, sweet; very hardy, vigorous, healthy, unusually productive; mid to late August, keeps and ships well.

**Moore's Diamond**—Large, yellowish-green; juicy, good; vigorous, hardy, productive; ripens a little earlier than Concord.

**Moore's Early**—About two weeks earlier than Concord; large, black, with a heavy bloom; desirable for home and market for its size, season, hardness and productiveness.

**Niagara**—A white Concord; ripens with it or a little later; large, greenish-white to pale yellow; sweet, good for table and market; vigorous, productive.

**Worden**—Black; resembles Concord, but larger and better quality and 5 to 10 days earlier; vigorous, hardy, productive.



Niagara, the  
White  
Concord.

### Prices of Grapes:

	One	Two	Three	Per 10	Per 100
Agawam.....	\$0.10	\$0.15	\$0.21	\$0.60	\$5.00
Campbell's Early.....	.15	.28	.40	1.25	10.00
Concord.....	.10	.15	.20	.50	3.00
Moore's Diamond.....	.10	.15	.21	.60	5.00
Moore's Early.....	.10	.15	.21	.60	5.50
Niagara.....	.10	.15	.21	.60	5.00
Worden.....	.10	.15	.21	.60	5.00

Above prices are for one year No. 1 vines. It has been demonstrated that they will give a commercial crop as soon as two year vines. Five of a kind at 10 rates; 50 or more in lots of 25 or more of a kind at 100 rates. Write for prices in large lots.

## Gooseberries

Gooseberries are easily grown, readily respond to care and are reliable annual bearers. There is almost always a demand for them at profitable prices. They do not require much space. Planted 3x5 feet; requires 2,900 per acre; 4x5 feet, 2,175 per acre. Planting and pruning instructions on page 45.

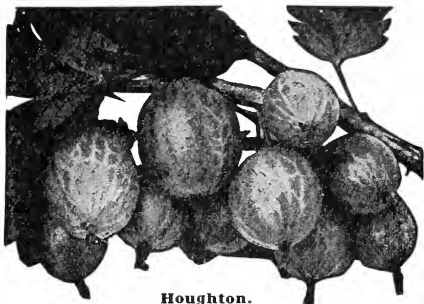
**Houghton**—Of medium size, but a profuse bearer and a money maker. Very free from mildew, of easy cultivation; the best for most sections; glossy pale dull reddish brown when ripe, but usually picked green.

2 yr., 12c each, \$1.00 per 10, \$8.00 per 100.

1 yr., 10c each, .80 per 10, 6.00 per 100.

**Downing**—Medium to rather large, pale green, good; productive; midseason.

2 yr., 20c each, \$1.50 per 10, \$14.00 per 100.



Houghton.

## Currants

In the home garden they may be grown in almost any soil. Plant 2x3½ or 3x4 feet. In the warmer regions give them a northern exposure or partial shade such as the north side of a fence or wall. Further information is given on page 45. Strong 2 yr., 15c each, \$1.00 per 10, \$7.00 per 100.

**Fay's Prolific**—Bunch long, well filled; fruit large, dark red, mild, good; midseason; vigorous, spreading growth.

**Victoria**—Bunch medium; fruit large, bright red, mild acid, good; midseason to late; growth strong, upright; productive.

**White Dutch**—Full medium size, yellowish white; good quality, less acid than the red currants.

## Raspberries

Another berry that yields quick returns, beginning to bear the second year. It fills the gap between strawberries and blackberries, sells well and is a reliable cropper under good conditions. In the Biggle Berry

Book F. W. Card is quoted as computing the average yield from the figures of 58 growers at nearly 78 bushels per acre.

Planted 4x6 ft., requires 1,825 per acre; 3x5 ft., 2,900 per acre. Deep soil that will retain moisture in a dry season is preferable. Additional particulars are given on page 46.

Arranged alphabetically. 50 of a kind at the 100 rate; 500 at the 1,000 rate.

**Black Pearl**—A new variety that promises to become a leader among black raspberries. A little earlier than Cumberland; of good quality; jet black; firm, hardy, vigorous. 30c per 10, 60c per 25, \$2.00 per 100.

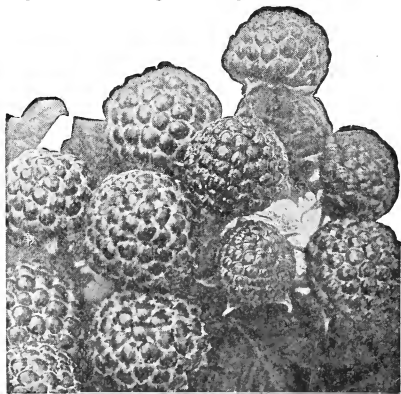
**Cardinal**—Very large; very hardy; very productive; easily grown; rich flavor; purplish red. Can be grown farther South than most Raspberries. 30c per 10, 60c per 25, \$2.00 per 100, \$15.00 per 1,000.

**Cumberland**—Black cap; very large, firm, of excellent quality; midseason; very hardy and very productive. 30c per 10, 60c per 25, \$2.00 per 100, \$15.00 per 1,000.

**Kansas**—Black cap; large, firm, of good quality; early; productive. 25c per 10, 40c per 25, \$1.50 per 100, \$12.00 per 1,000.

**King**—Large, bright scarlet; firm; fine flavor; season early and long; hardy, vigorous, productive. 25c per 10, 45c per 25, \$1.50 per 100, \$12.00 per 1,000.

**St. Regis; Ranere**—Bright red; good quality; hardy, productive; season early and long; bears freely in the fall in some sections, but little in others. 40c per 10, \$2.00 per 100.







## Blackberries Pay Well

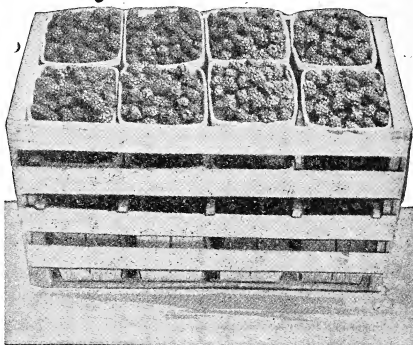
Prof. L. H. Bailey says there is no fruit capable of yielding greater profits. Mr. R. B. Rushing says profits depend almost entirely on the management the patch receives. There will usually be from 150 to as high as 250 cases of 24 quarts from an acre, and that it is usually consistent to figure on an average of \$100 to \$150 per acre after paying for picking, boxes and express.

Blackberries begin bearing the second year and may be depended upon for regular, profitable crops. They thrive in almost all soils, but are at their best in strong, deep loam that will retain moisture, tending towards clay rather than sand. They will succeed on soil too light, dry and poor for Strawberries and Raspberries. Plant 2 to 4 feet apart in rows 8 feet apart; 2 by 8 feet requires 2,725 plants per acre.

50 of a kind at 100 rate, 500 of a kind at 1,000 rate. Arranged alphabetically.

**Ancient Briton**—Large, without core, sweet, very good; ripens with or after Snyder; hardy, very productive. 25c per 10, 45c per 25, \$1.50 per 100, \$14.00 per 1,000.

**Early Harvest**—The most profitable of all on account of its extreme earliness, hardness and productiveness; glossy black, firm and ships well; growth strong. 25c per 10, 45c per 25, \$1.50 per 100, \$14.00 per 1,000.



**Lovett**—Large, with little core; sweet. 30c per 10, 50c per 25, \$1.70 per 100, \$15.00 per 1,000.

**Snyder**—Midseason; of medium size, juicy, sweet; while not highest quality, it is valuable for its extreme hardness and productiveness; indispensable as a midseason variety. 25c per 10, 45c per 25, \$1.50 per 100, \$14.00 per 1,000.

**Ward**—Berries large, tender, sweet; excellent quality. \$1.50 per 100, \$14.00 per 1,000.

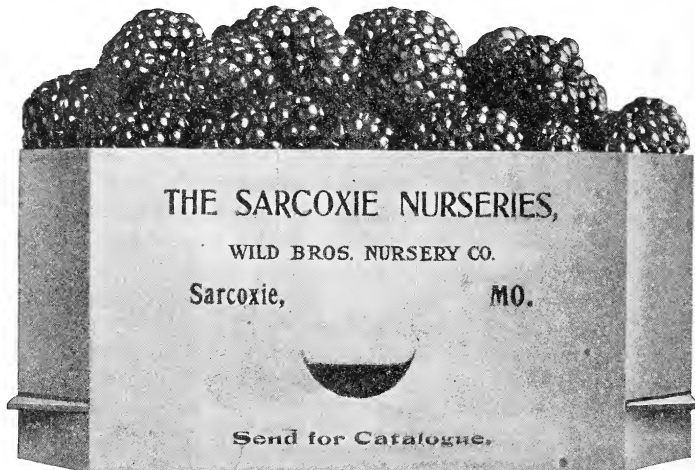
## Lucretia Dewberries

Wherever there is a market for Blackberries, Dewberries will be profitable. Ripening between Strawberries and Blackberries, they command a good price. Land can be used that is too wet or not fertile enough for Blackberries and they are less expensive to grow. Plant 2 feet apart in rows 4, or preferably 5, feet apart requires 5,450 or 4,350 plants per acre, respectively.

Planting instructions will be found on page 45.

**Lucretia**—Large, often 1½ inches long; sweet and luscious throughout; for size and quality is unexcelled by any of the Blackberries; ripens at the

close of the strawberry season before Early Harvest; the variety most extensively grown for market. Fine tip plants, 25c per 10, 35c per 25, \$1.00 per 100. \$8.00 per 1,000.





## Rhubarb or Pie Plant

Rhubarb or Pie Plant is easily produced in a commercial way, yields immensely and is easily gathered and put into shape for market. It can be shipped almost any distance. The demand for it on the market makes it one of the best vegetables for commercial use; Geo. W. Holsinger, before the Horticultural Society. Plant  $2\frac{1}{2} \times 4$  feet, covering the crown 2 inches. The secret of success is well drained soil. Information will be found on page 46.

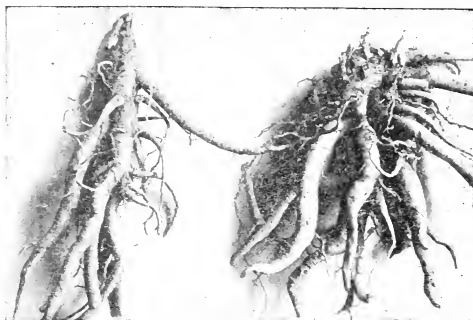
**Myatt's Linnaeus**—Early, just before Asparagus; immense stalks, tender, delicately flavored; productive and continues long in use; the best variety for general use. Nice large roots.

Each doz. per 25 per 100

2-year XXX				
size.....	\$0.15	\$1.00	\$2.25	\$8.00
2-year size...	.10	.60	1.10	4.00
1-year size...	.10	.50	.85	3.00

### HORSERADISH

**Bohemian**—A quick-growing variety, producing very large roots; productive; so easily grown it should find a place in every garden; a rich, moist soil is preferable. Sets, 5c each, 25c doz., \$1.00 per 100.



One and Two-Year Rhubarb.

### SAGE

**Holt's Mammoth**—Very large leaves of unusual substance, strong flavor and superior quality; vigorous. Genuine country sausage needs genuine country sage. Plant some in your garden. Strong plants, 15 and 20c each.

## Asparagus

This earliest of vegetables, excepting Rhubarb, is a money maker for the city markets, always calling for early table delicacies, and indispensable for the home. Even in the smaller towns there is usually a call for Asparagus and there a small patch is often a profitable side line. Mr. Holsinger reported to the Kansas State Horticultural Society, as follows: "For me, fortunately situated near a large, growing city, with a rapidly growing population, and facilities for securing plenteous supplies of stable manure, the culture of Asparagus has been decidedly successful. I know of a small patch of Asparagus ( $\frac{1}{4}$  acre) that in a favorable season yielded at the rate of \$1,300 per acre. It is not my intention to lead you to believe that this can be done every year or even one year on a large patch, but I am sure that a small patch of, say two or three acres, highly cultivated and carefully tended, can be made to net \$400 per acre year in and year out. I know of one patch of two acres that had produced at the rate of \$500 per acre for three years."

**Conover's Colossal**—The old standard market variety; very large, rapid growth, productive, good flavor, 1, 2 and 3-year.

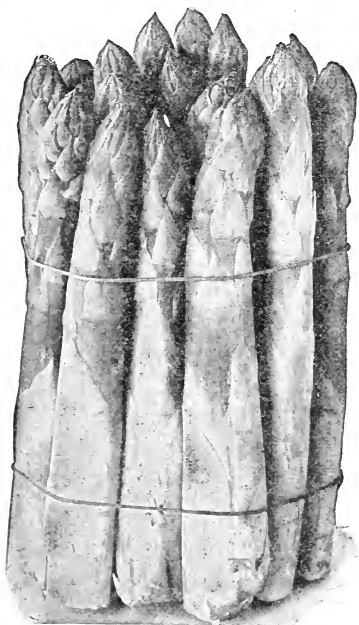
**Early Giant Argenteuil**—A French variety noted for its earliness, productiveness and immense stalks, good flavor. 3-year only.

**Palmetto**—Large, early productive, of delicious flavor, very resistant to rust; adapted to North and South. 1, 2 and 3-year.

#### Prices of fine, strong plants:

3-yr., 30c per 10.	\$1.00 per 100,	\$6.00 per 1,000.
2-yr., 25c per 10.	.75 per 100,	5.00 per 1,000.
1-yr., 20c per 10.	.60 per 100,	4.00 per 1,000.

Planting instructions on page 46.



From a few hundred you can have an abundance of Asparagus each spring and some to sell.

## Strawberries

With the exception of Progressive (Everbearing) we sold before this catalog was issued all the Strawberries we can supply for spring 1917. We are including the descriptions here as this catalog is intended for two years. Write for prices for fall 1917 and spring 1918.

**Aroma**—A heavy yielder; very large, conical deep red, glossy; firm, ships well; begins midseason and continues late; good; in this section it is planted much more than any other variety; it thrives on almost all soils; perfect flowered.

**Bubach**—A very large, conical, bright red, waxy, showy berry; productive and profitable for home and nearby markets; imperfect flower.

**Columbia**—A cross of Warfield and Gandy; large; attractive light scarlet; productive; late; imperfect flowered.

**Florella**—Large to very large; crimson all over; early; prolific; perfect flowered.

**Gandy**—Very large, very late, bright red, firm and a good shipper; not successful on dry, sandy soil but excellent and profitable on new or timber land; perfect flowered, but better with Aroma to pollinize it.

**Haverland**—A large long, berry, full and round at the stem and tapering to a blunt point; bright crimson on the sunny side shading to light red; very attractive in the box; a heavy bearer; succeeds almost everywhere; midseason to late; imperfect flowered.

**Klondike**—Medium early, dark red, of good size, well retained during the season; excellent for warm, sandy soils; productive and a good shipper; perfect flowered.

**Lady Cornelle**—Large, rich glossy red, good quality, prolific; midseason; perfect flowered.

**Michel**—Very early, rich crimson; not very large, but very productive, sweet, rich and of good flavor; hence an excellent table berry; ships well; perfect flowered.

**Progressive**—The best of the everbearing or fall bearing Strawberries; of good quality, the flavor and shape reminding one of Warfield and Dunlap; productive; of medium size; perfect flowered. If the earlier blossoms are cut off a heavier fall crop will result. Will bear the season it is planted. 60c per doz., \$1.00 per 25, \$3.00 per 100.

**Senator Dunlap**—Dark glossy red, resembling Warfield, and of same season; rich, juicy; a good, firm, medium large midseason variety; ships well, bears heavily; succeeds almost everywhere and in almost all soils; perfect flowered.

**Texas**—Large, early, glossy crimson; almost round; rich, juicy; productive, firm, a good shipper; succeeds in almost any soil; perfect flowered.

**Warfield**—Of high quality and a rich, deep red which, with its delicate flavor, is better retained when canned or preserved than any other variety; a heavy bearer and a good shipper; medium to large; midseason and bears over a rather long season; imperfect flowered.

## Hardy Evergreens

Beautiful winter and summer, Evergreens produce a pleasing effect from the time they are planted. No trees add greater dignity and distinction. Besides their value as specimens on the lawn, for screens and shelter from winter's winds, the taller growing varieties form ideal backgrounds for the showy flowering trees and shrubs of spring, the berries of autumn, or the light green, silver or golden growth of the smaller evergreens. Beautiful effects are secured by planting in masses varieties that contrast finely in color, form and foliage, such as the Pines, Spruces, Arborvitae and Junipers, the lower growing ones to the front.

Our evergreens have been transplanted several times to secure an abundance of fibrous roots. When dug the roots are protected and they are packed under cover in a moist atmosphere. When planting the instruction on page 46 should be observed.

At these prices the roots will be carefully packed in damp shingle tow and hay. If wanted dug with a ball of earth sewed in burlap, add the following to prices quoted, to cover the cost of such: 2 to 3 ft. or smaller, 20c each, \$1.50 per 10; 3 to 4 ft., 25c each, \$2.00 per 10; 4 to 5 ft., 30c each, \$2.50 per 10; and specified "balled and burlapped."

Five of a kind at the 10 rate, less at each rate; 50 of a kind at 100 rate.

### Arborvitae, Chinese Golden Dwarf

**Biota aurea nana**—The new growth in the spring and latter summer is intense gold suffused with green, in winter becoming green to bronze green. Of superb shape, dwarf, compact habit, and unexcelled for lawn and cemetery use; very effective for window boxes and excellent tubbed where it is too cold for palms and other decorative plants. Without a doubt the best of the dwarf golden arborvitae and admired by all lovers of the formal in evergreens.

5 feet.....	\$4.50 each, \$40.00 per 10
4 feet.....	3.25 each, 30.00 per 10
3 feet.....	2.00 each, 20.00 per 10
2 ½ feet.....	1.50 each, 12.50 per 10

2 feet.....	1.25 each, 11.00 per 10
1 ½ feet.....	1.00 each, 9.00 per 10

### Arborvitae, Chinese Golden

**Biota aurea conspicua**—The best of the large growing golden evergreens. A most beautiful arborvitae of the Oriental type, of compact, erect, symmetrical habit. The foliage is intense gold, some branches of an almost solid metallic tint, others suffused with green. Of taller and more rapid growth than the foregoing and very desirable and attractive where a good sized golden tree is wanted. Its golden color is well retained into winter.

6 to 7 feet.....	\$7.00 each, \$60.00 per 10
5 to 6 feet.....	4.50 each, 40.00 per 10



**Irish Juniper.**  
Excellent as a Tubbed Specimen and on the Lawn

## HARDY EVERGREENS—Continued



**Chinese Golden Dwarf Arborvitae**  
A perfect gem for large or small grounds

### Arborvitae, Hovey's Golden

A distinct, compact American seedling with numerous flat branches; light golden green foliage; dense and conical.

3 to 4 feet.....	\$0.80 each,	\$7.00 per 10
2 to 3 feet.....	.60 each,	5.00 per 10
1½ to 2 feet.....	.50 each,	4.00 per 10

### Arborvitae, Pyramidal

A compact and narrowly pyramidal tree, with short branches densely covered with bright green foliage, in form an almost perfect column; very formal and attractive.

3 to 4 feet.....	\$0.75 each,	\$6.00 per 10
2 to 3 feet.....	.60 each,	5.00 per 10
1½ to 2 feet.....	.40 each,	3.50 per 10
1 to 1½ feet.....	.35 each,	3.00 per 10

### Arborvitae, Siberian

A small, extremely hardy tree becoming broadly conical with age; very dense, dark green foliage, bluish-green below, its color well retained during winter; grows compact and shapely without shearing, yet endures it well, hence admirably adapted for hedges; an excellent small lawn tree.

3 to 4 feet.....	\$0.80 each,	\$7.50 per 10
2 to 3 feet.....	.65 each,	6.50 per 10
1½ to 2 feet.....	.40 each,	3.50 per 10
1 to 1½ feet.....	.35 each,	3.00 per 10

### Arborvitae, Globe

A low compact form with deep green foliage assuming bronze tints in winter. A symmetrical globe in outline and of very striking appearance as individual specimens on lawns, in formal garden, and in window boxes or tubbed on porches.

24 to 30 inches.....	\$1.20 each,	\$10.00 per 10
20 to 24 inches.....	.80 each,	6.00 per 10
16 to 20 inches.....	.70 each,	5.00 per 10
12 to 16 inches.....	.50 each,	4.00 per 10

### Juniper, Irish

Its finely cut bluish-green foliage is highly attractive and its form in pleasing contrast with the globe and bush evergreens; a dense, slender columnar tree with numerous upright branches closely surrounding the body; quick growing, formal and striking in outline and very effective in Italian and landscape gardening.

4 to 5 feet.....	\$0.90 each,	\$8.00 per 10
3 to 4 feet.....	.70 each,	6.00 per 10
2 to 3 feet.....	.50 each,	4.00 per 10

### Juniper, Savin

Thickly branched, low and spreading with very dense, dark green foliage. A favorite where a tree out of the ordinary is desired, especially for rock gardens and window boxes.

3 to 4 feet spread.....	\$1.00 each,	\$9.00 per 10
2 to 3 feet spread.....	.90 each,	8.00 per 10
1½ to 2 feet spread.....	.65 each,	6.00 per 10

### Pine, White

A tall, stately tree with regular whorls of horizontal branches, forming a symmetrical, pyramidal crown; soft bluish-green leaves in 5's, 2 to 4 or 3½ to 5 inches long; cones 3 to 5 inches long. Of rapid growth, the most beautiful of our native pines and retains its color well during winter.

3 to 4 feet.....	\$0.60 each,	\$5.00 per 10
2 to 3 feet.....	.50 each,	4.00 per 10
1½ to 2 feet.....	.40 each,	3.00 per 10

### Spruce, Colorado Blue

Very richly colored foliage of a silvery-blue sheen. Its form and striking appearance make it unquestionably the finest lawn tree extant.

2 to 3 feet.....	\$4.00 each
1½ to 2 feet.....	3.00 each

### Spruce, Colorado, Green Type

Form and habit like above but foliage is green.	
2 to 3 feet.....	\$0.75 each
1½ to 2 feet.....	.60 each



**Trees "Balled and Burlaped"**  
Pyramidal Arborvitae (center), Woodward  
Globe Arborvitae (left), Chinese Golden  
Dwarf Arborvitae (right).



## Hardy Broad-Leaved Evergreen      Trees and Shrubs

**T**HESE beautiful trees and plants are quite as necessary to finished planting effects as many classes more extensively planted. No landscape is complete without them and many would be greatly enhanced by their more extensive use. A northern exposure to prevent or moderate the direct rays of the sun is best. If such a situation is not at hand, partial shade is satisfactory, and under either of these conditions greener foliage with more luster is produced. A cool, moist soil, though well drained, is best, and a slight covering of forest leaves will keep the roots nearer the proper temperature.

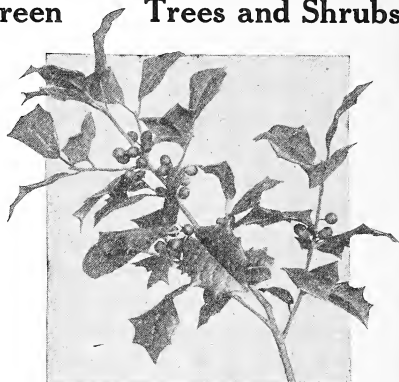
### Box Wood

A small tree or shrub with small, glossy, dark green foliage, thickly covering the many small branches, and possessing a peculiar fragrance.

18 to 24 in., bush form. . . \$1.00 each, \$9.00 per 10  
12 to 18 in., bush form. . . .60 each, 5.00 per 10  
6 to 8 inches for lining out hedges, 10c each, 80c per 10, \$6.00 per 100.

### Holly, American

(*Ilex opaca*)—A very handsome evergreen tree, familiarly known as Christmas Holly. Among its spiny green leaves are borne clusters of bright red berries. Very desirable. Should be planted in



**The well-known Christmas Holly**

groups to produce berries. Most of the leaves should be clipped off when transplanting.

6 to 8 feet. . . . . \$2.50 each, \$22.50 per 10  
4 to 6 feet. . . . . 1.00 each, 9.00 per 10  
3 to 4 feet. . . . . .60 each, 5.00 per 10  
2 to 3 feet. . . . . .50 each, 4.00 per 10

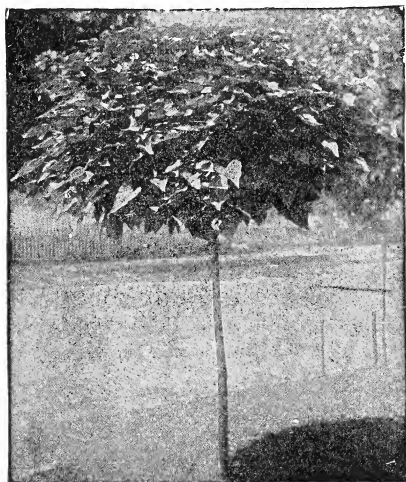
Adam's Needle (*Yucca*) see page 27.

## Shade Trees

In planning the home grounds the first consideration is a good background for the house. If such does not already exist, plant trees that will give the effect as quick as possible with the slower growing, more permanent varieties. Then when the latter have attained size the rapid growing ones such as Norway Poplar and Sycamore may be cut out if the trees are too thick. In addition the house should be framed with trees near each end; then a group may be used about the lawn as needed. Such planting transforms the house into a home. A house among tall trees, under which there stretches a broad expanse of lawn with shrubs and brightly colored flowers attractively arranged at the borders, a few of the lower growing shrubs at bare corners of the house and along blank wall spaces and vines to drape the porch, it at once appeals to the imagination and to the sense of fitness. We say it looks home-like.

To secure these results start now. Every year's delay is a year lost. Nothing will grow so well with so little attention as trees, yet they amply repay the attention given them. Planting directions are given on page 46

These trees are Nursery grown, which gives better shaped trees and better root system than those dug from the forest, hence better results. Cal. this designates caliper or diameter near the ground. Trees larger than 8 feet will usually be pruned back somewhat unless otherwise ordered. Five of a kind at the 10 rate, less at each rate; 50 of a kind at 100 rate.



**Umbrella Catalpa**



## SHADE TREES—Continued

## Chestnut

A very ornamental tree with pleasing foliage and attractive in flower; in addition to being a handsome shade tree it bears nuts of excellent quality and the spiny burrs are very ornamental.

8 to 10 feet.....\$0.70 each, \$6.00 per 10  
6 to 8 feet......60 each, 5.00 per 10

## Catalpa Bungei; Umbrella Catalpa

A dwarf form grafted on a straight, upright stem, forming a dense, round head, similar to the standard Bay Tree in form but larger and tall. Much used for formal work. See cut.

2 year heads.....\$1.00 each

## Catalpa Speciosa; Western Catalpa

A rapid grower, soon becoming a large tree; very hardy; leaves large, dark green, heart shaped; flowers about 2 inches in diameter, white with two yellow stripes, dotted reddish and violet, in large, pyramidal panicles, followed by long seed pods; blooms in early summer.

2 to 2½ in. caliper.....\$0.70 each, \$6.00 per 10  
1½ to 2 in. caliper......50 each, 4.00 per 10  
1 to 1½ in. caliper......35 each, 3.00 per 10

Dogwood—See shrubs, page 18.

## Elm, American White

A large and stately tree with long, graceful branches; leaves 3 to 6 inches long, oblong, sharply serrate; perhaps the most rapid growing hardwood tree, and easily transplanted. The well known Elm of our American forests and one of the best trees for street, lawn and landscape planting.

2½ to 3 in. caliper.....\$1.50 each, \$12.50 per 10  
2 to 2½ in. caliper..... 1.00 each, 9.00 per 10  
1½ to 2 in. caliper......75 each, 6.00 per 10  
1 to 1½ in. caliper......50 each, 4.00 per 10



Norway Poplar is of very rapid growth

## Elm, Winged

A medium sized tree, with branches curiously corky-winged, leaves dark green, becoming yellow in autumn.

1 to 1½ in. caliper.....\$0.50 each, \$4.50 per 10  
6 to 8 ft......40 each, 3.00 per 10  
4 to 6 ft......30 each, 2.50 per 10

## Hackberry; Nettle Tree

Crown broad and graceful, making it an excellent shade tree; leaves medium size, bright shiny green becoming yellow in autumn; thrives in almost any soil, even in dry situations; vigorous, transplants easily.

1½ to 2 in. caliper.....\$0.75 each, \$6.00 per 10

## Linden, American; Basswood

A broad round topped tree of rapid growth, grand for street or lawn; leaves heart shaped, bright green fading to yellow in autumn; its creamy white fragrant flowers appear in clusters in summer.

1 to 1½ in. caliper.....\$0.75 each, \$6.50 per 10  
6 to 8 ft......60 each, 5.00 per 10  
4 to 6 ft......40 each, 3.50 per 10  
3 to 4 ft......30 each, 2.50 per 10

## Sugar Maple; Hard or Rock Maple

A very stately tree, thriving in almost any soil. Its dense symmetrical crown and beautiful foliage at once pronounce it the best of its class for lawn, street or avenue planting. It has a picturesque beauty all its own in early spring when the entire tree is covered with its golden yellow flowers. Leaves three to five-lobed, dark green above, pale beneath, in autumn assuming most beautiful shades of yellow, orange and scarlet. Deeply rooted, allowing grass to grow freely about the trunk.

1½ to 2 in. caliper.....\$1.25 each, \$12.00 per 10  
1½ to 1½ in. caliper..... 1.00 each, 9.00 per 10  
1 to 1½ in. caliper......75 each, 6.50 per 10  
6 to 8 ft......50 each, 4.00 per 10  
5 to 6 feet......40 each, 3.00 per 10  
4 to 5 feet......30 each, 2.50 per 10



American Elm, the most rapid in growth of the hard wooded trees



**Sugar or Hard Maple has a beauty all its own**

### Norway Maple

A large, handsome tree that makes a dense round head and is excellent for lawn planting; leaves five-lobed, dark green and shining, turning pale yellow in autumn; flowers yellowish-green.

1½ in. cal., 8 to 10 ft.	\$1.25 each,	\$12.00 per 10
1¼ in. cal., 6 to 8 ft.	1.00 each,	9.00 per 10
1 in. cal., 5 to 6 ft.	.70 each,	6.00 per 10
¾ to 5 feet.	.40 each,	3.50 per 10

### Soft, White or Silver Maple

Of very rapid growth, soon becoming a large tree, and very effective when quick shade is desired. Well known and widely planted. Leaves deeply five-lobed, bright green above, silvery beneath, becoming pale yellow in autumn.

2 to 2½ in. cal.	\$1.00 each,	\$8.00 per 10
1½ to 2 in. cal.	.70 each,	6.00 per 10

### Pin Oak

A handsome tree with drooping branches, forming a broadly pyramidal crown; leaves deeply 5 to 7 lobed, glossy dark green above, light green beneath, with autumn tones of deep and brilliant crimson, brown and bronze; growth rapid; transplants easily.

2 to 2½ in. caliper.	\$1.75 each,	\$15.00 per 10
1½ to 2 in. caliper.	1.25 each,	10.00 per 10
1 to 1½ in. caliper.	1.00 each,	9.00 per 10
5 to 6 feet.	.60 each,	5.00 per 10
4 to 5 feet.	.40 each,	3.50 per 10

### White Oak

A spreading, towering species with rugged, massive trunk and branches; trunk light gray; leaves highly colored red when unfolding, bright green at maturity, in autumn purple and red, falling tardily, sometimes not till spring. One of the finest oaks for lawn or park.

1½ to 2 in. caliper.	\$1.25 each,	\$11.50 per 10
1 to 1½ in. caliper.	1.00 each,	9.00 per 10
5 to 6 feet.	.50 each,	4.50 per 10
4 to 5 feet.	.40 each,	3.50 per 10

### Plane Tree; American Sycamore

A very large and lofty tree with massive branches forming a round head. In winter its whitish mottled

trunk presents a striking effect; of very rapid growth. An excellent street tree, withstanding smoke and city conditions. Sometimes called Buttonwood from its pendulous seeds.

2 to 2½ in. caliper.	\$1.00 each,	\$9.00 per 10
1½ to 2 in. caliper.	.75 each,	6.00 per 10
1 to 1½ in. caliper.	.50 each,	4.00 per 10
6 to 8 ft., under 1 in.	.30 each,	3.00 per 10

### Norway Poplar

"The Sudden Law Log." will no doubt supplant the Carolina Poplar, which it resembles in general appearance, but is of perhaps more rapid growth and seems to hold its leaves better in the fall; forms an upright pyramidal head; perhaps the most rapid grower and much used in laying out new city additions and whenever quick shade is desired.

2 to 2½ in. caliper.	\$1.00 each,	\$9.00 per 10
1½ to 2 in. caliper.	.75 each,	6.50 per 10
1 to 1½ in. caliper.	.50 each,	4.00 per 10
6 to 8 feet.	.30 each,	2.50 per 10
4 to 6 feet.	.25 each,	2.00 per 10

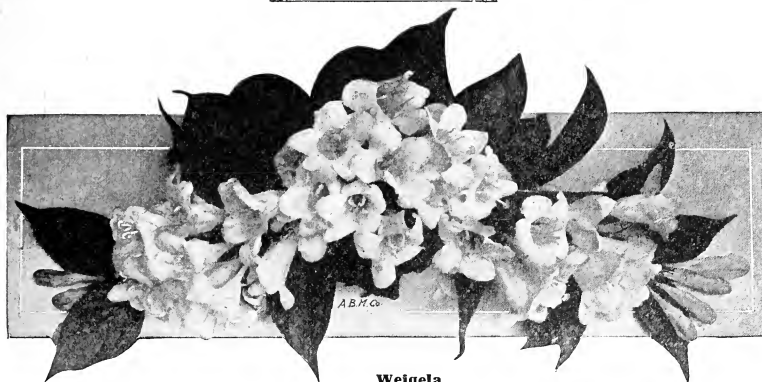
### Tulip Tree; Yellow Poplar

A magnificent native of tall pyramidal habit and a very rapid grower; leaves rather large, four-lobed, light bluish green and lustrous, in autumn pale yellow and orange. Well named for its cup-shaped flowers, greenish-yellow blotched with orange, resembling a tulip.

2½ to 3 in. caliper.	\$2.50 each,	\$22.50 per 10
2 to 2½ in. caliper.	1.75 each,	15.00 per 10
1½ to 2 in. caliper.	1.25 each,	10.00 per 10
1 to 1½ in. caliper.	.75 each,	6.00 per 10
6 to 8 feet.	.60 each,	4.00 per 10



**The Tulip Tree is well named for its flowers**



**Weigela**

## Hardy Flowering Shrubs

The early days of spring are brightened and made cheerful by the great masses of Golden Bell often blooming here in March. And by a proper selection of shrubs a succession of flowers can be had from April to September. Then follows the Hardy Chrysanthemums, the glory of autumn. Flowering shrubs make a beautiful display in a year or two, giving the lawn an attractive, finished appearance, and should be used freely in laying out new grounds. There is hardly a lawn which their more extensive use would not improve. They appear to best advantage planted in groups along the boundaries or division line of property, at the edge or corner of the lawn, at the foundation of buildings, and along walks and drives.

Houses with a high foundation may have the tall growing shrubs planted about the base, while dwarf varieties should be used with low foundations.

The outline of base and mass planting should be irregular and as a rule two or more specimens should be used. Individual specimens on the lawn should not be too much scattered. Planting and pruning instructions are given on page 47.

Five of a kind at the 10 rate, less at each rate, 50 of a kind at the 100 rate.

### **Althea (Rose of Sharon)**

Stately shrubs of upright habit, attaining a height of 10 to 15 feet; valuable as single specimens and as screens and hedges, particularly where soil and arid climate do not permit the use of many other shrubs. The blooms, which resemble the hollyhock in form but more refined and not so large, appear in abundance in late summer when few other shrubs are in bloom, and make a good cut flower. The foliage is a fine dark green. The newer varieties are much improved in size and color. Assorted single and double, white, pink, red and lavender.

3 to 4 feet.....	\$0.35 each,	\$3.00 per 10
1½ to 3 feet.....	.25 each,	2.00 per 10
Mailing size, postpaid....	.20 each,	2.00 per 10

### **Barberry; Thunberg's or Japanese**

Of dwarf, dense, spreading habit with graceful spiny branches and small, beautiful bright green leaves appearing very early in the spring, and coloring brilliantly in autumn, a mingling of bronze orange, scarlet and crimson. Inconspicuous creamy white flowers, followed by scarlet berries remaining during the winter. It thrives in any ordinary soil, forms a nicely specimen plant, and is admirably adapted for low hedges, borders or edges. Rarely reaches over 4 feet and may be kept to 2 or 3 feet.

18 to 24 in.,	\$0.20 each,	\$1.50 per 10,	\$12.50 per 100
12 to 18 in.,	.15 each,	1.00 per 10,	8.00 per 100
6 to 12 in.,	.10 each,	.60 per 10,	5.00 per 100

### **Calycanthus floridus**

Sweet scented shrub—An unique old garden favorite, valued for its odd, double, spicily fragrant chocolate red flowers in latter spring and early



**Golden Bell, one of the first flowers to let us know spring is here**



## FLOWERING SHRUBS—Con.

summer; twigs reddish, leaves dark green above, downy beneath; thrives in sun or shade, attains a height of 3 to 6 feet.

25c each, \$2.00 per 10.

### Deutzias

Few shrubs have the delicate beauty of the Deutzias, and they deserve a wide acquaintance for their profusion of flowers; they are easily grown and will thrive in almost any well drained soil. Gracilis and Lemoine are particularly suited to plant in front of tall growing shrubs, or where a dwarf shrub is wanted.

#### Deutzia Gracilis

A small shrub, attaining a height of 3 feet, with slender, often arching branches and single pure white flowers as delicate as Lily of the Valley, in graceful nodding racemes in early summer. 25c each.

#### Deutzia, Lemoine's

A very desirable small shrub with spreading branches, becoming about 3 feet tall; flowers pure white, single, in broad clusters in early spring. 25c each.

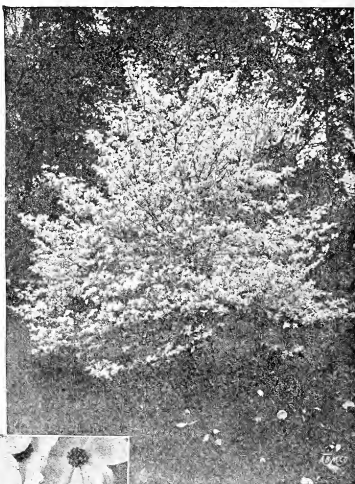
#### Deutzia Pride of Rochester

In early spring the bush is fairly covered with dainty double tassel-like flowers in racemes 4 to 6 inches long, white with the outer petals tinted rose, in a setting of deep green foliage. A vigorous, tall, upright shrub of easy culture, thriving in any well drained soil. Under the most adverse conditions it will give a fair show of bloom, but place it in a position where it has room to develop and you will be amply rewarded with a profusion of flowers.

4 to 5 feet...\$0.30 each, \$2.50 per 10  
3 to 4 feet... .25 each, 2.00 per 10  
2 to 3 feet... .20 each, 1.50 per 10

#### Dogwood, White Flowering

**Cornus florida**—In early spring before the leaves appear the entire tree is white with its showy four petal flowers, curiously blotched with pink. The flowers are followed by scarlet berries; leaves oval, bright green becoming deep red in autumn. A large shrub or small tree growing to a



#### Dogwood

height of 10 to 15, rarely 30 feet, of fine form and very desirable; succeeds in partial shade. One of the showiest flower trees.

4 to 5 feet....\$0.70 each,  
\$6.00 per 10  
3 to 4 feet.... .50 each,  
\$4.00 per 10  
2 to 3 feet.... .35 each,  
\$3.00 per 10



#### Golden Bell; Forsythia

One of the first flowers to let us know spring is here. Few if any of the spring flowering shrubs surpass the splendor and brilliancy of the Golden Bell; they are easily grown in almost any kind of garden soil, and have handsome clean foliage, which is remarkably free from insects and remains unchanged until late in the fall.

**Golden Bell (*Forsythia viridissima*)**—One of the most welcome sights of early spring with its masses of golden yellow flowers, even before the leaves are developed; it deserves a place in all collections. Erect in habit with green bark and dark green foliage; usually seen in shrubby borders and mass plantings, but makes a nice specimen shrub.

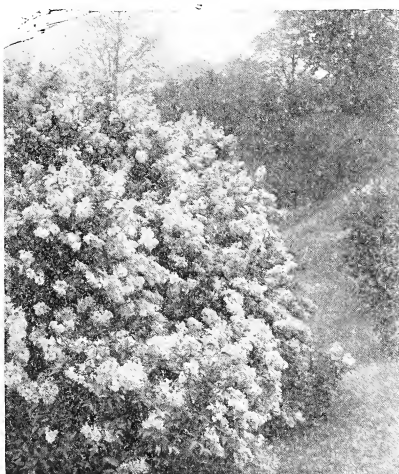
4 to 5 feet.....40c each, \$3.50 per 10  
3 to 4 feet.....30c each, 2.50 per 10

**Golden Bell, Weeping (*Forsythia suspensa*)**—A very graceful, drooping form of the above, very free flowering and highly effective planted on banks or retaining walls where the branches droop naturally; sometimes trained up a wall 5 or 6 feet, or in front of the piazza and its long branches allowed to sweep the ground.

4 to 5 feet.....\$0.40 each, \$3.00 per 10  
3 to 4 feet..... .30 each, 2.50 per 10

#### Hydrangea

**Hydrangea Hills of Snow or Everblooming**—This hydrangea becomes a good sized shrub to which the name Hills of Snow may well be applied—a profusion of large snow-white flowers turning green instead of bronze as do other hydrangeas. Easily grown in ordinary garden soil and thrives in partial shade but does best in full sun. It blooms from June till August when the following variety begins. Strong field grown plants. 40c each, \$3.00 per 10.



Persian Lilac blooms profusely



## FLOWERING SHRUBS—Con.

**Hydrangea paniculata grandiflora**—A good variety to follow Hills of Snow, blooming profusely in August and September when few other shrubs are in bloom. It produces the largest flower heads of any of the hardy shrubs. Allowed to grow naturally it assumes stately proportions, reaching a height of seven feet, and during the hot months is covered with its great pyramidal panicles, white on opening, assuming rose and bronze tints on the sunny side, and drooping gracefully of their own weight. Close pruning in early spring will increase the size of the panicles but, of course, reduce their number. The most popular hydrangea, and easily grown.

2 to 3 feet.....\$0.30 each, \$2.50 per 10  
1 1/2 to 2 feet......25 each, 2.00 per 10

### Honeysuckle, Bush

**Bush Honeysuckle**—Handsomeness in flower, showy in fruit, and ornamental in its bluish-green foliage, has everything to commend it. As a specimen shrub it assumes the proportions of a small tree, and will form an oval, symmetrical bush, covered in early June with its beautiful pink and white flowers, which give way later to pretty reddish berries. This fruit literally covers the shrub, making one wonder whether it is more attractive when in bloom or when bearing its berries.—Jephtha Frey, in Magazine Flowers. Blooms in May here. 25c each.

### Lilacs

**Persian Lilac**—For wealth of bloom and fragrance in the early spring, no shrub can displace the lilac. There are scores of new lilacs, double and single, in various shades, but the Persian holds its own with the best of them. It is a surer and freer bloomer than the common varieties, each branch being loaded in June with great purple clusters.



The name Mock Orange is almost a sufficient description



Hydrangea paniculata grandiflora and other shrubs used for a foundation planting

## FLOWERING SHRUBS—Con.



### Mock Orange, Sweet Scented

(*Philadelphus coronarius*)—The name is almost a sufficient description. It will grow in sun or shade and can be depended upon to produce a profusion of creamy-white four-petaled flowers, which clothe its branches for almost their entire length in late spring and early summer. Of vigorous habit, thriving in almost any soil well drained and forming a large bush 12 to 15 feet high in a few years, or can be kept lower by pruning, which should be done after flowering.

3 to 4 feet.....\$0.25 each, \$2.00 per 10  
2 to 3 feet......20 each, 1.50 per 10

### Pearl Bush

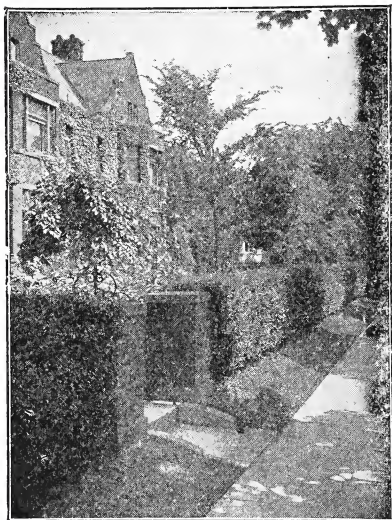
*Exochorda grandiflora*—A Chinese shrub with slender branches. Very attractive in early spring with its fragrant terminal racemes of pearl-like buds and starry white flowers—the most brilliant shrub of its season. Best when massed with other shrubs.

3 to 4 feet.....\$0.30 each, \$2.50 per 10  
2 to 3 feet......25 each, 2.00 per 10  
1½ to 2 feet......20 each, \$1.50 per 10

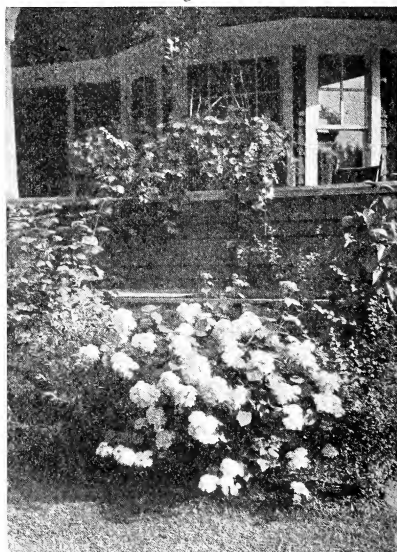
### Bush Honeysuckle, handsome in flower, showy in fruit

Either in groups of shrubbery or planted as a specimen, this lilac is a magnificent bush, forming a pyramid of bloom which is the admiration of all.—Jephtha Freyling, Magazine Flowers. Pale lilac. Blooms here in May.

3 to 4 feet.....\$0.35 each, \$3.00 per 10  
2 to 3 feet......25 each, 2.00 per 10



California Privet, perhaps the most popular hedge



### This Hydrangea is well named Hills of Snow

### Privet for Hedging

**Privet, California**—This most popular hedge plant is of a free, upright growth, with glossy dark green leaves. Nearly evergreen in the Southern states. Also used for single specimens for terrace, hall or porch decoration. For hedges set in trenches, the smaller sizes 8 inches apart, the larger 10 to 12 inches. Prune to within 4 to 6 inches of the ground when planting, severly the next one or two seasons, after that to maintain the height and shape desired.

2 to 3 feet.....75c per 10, \$5.00 per 100  
1½ to 2 feet.....50c per 10, 3.50 per 100  
1 to 1½ feet.....35c per 10, 2.50 per 100



## FLOWERING SHRUBS—Con.



**Deutzia Pride of Rochester** has dainty tassel-like flowers

**Privet, Amour River of the North**—A rapid growing variety with small pleasing foliage, resembling California Privet in habit, but somewhat more spreading and much harder and especially valuable in sections where California freezes back.

2	to 3 feet.....	\$0.35 each,	\$3.00 per 10
		\$6.00 per 100	
1½	to 2 feet.....	.30 each,	2.50 per 10
		\$4.50 per 100	
1	to 1½ feet.....	.25 each,	2.00 per 10
		\$3.00 per 100	

### Snowball

One of the old-time garden favorites. A hardy shrub bearing an abundance of handsome showy white flowers in large, globular clusters, in early spring.

1½	to 2 feet.....	.25c each,	\$2.50 per 10
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### Spirea

Few shrubs lend themselves to every situation or condition as well as Spireas, showy, free flowering shrubs of easiest culture and covering a considerable blooming period from spring into summer. They are valuable for garden, lawn and landscape planting, being graceful, compact and hardy, preferring sunny situations.

### Prices of Spirea except A. Waterer:

4	to 5 feet.....	\$0.35 each,	\$3.00 per 10
3	to 4 feet.....	.30 each,	2.50 per 10
2	to 3 feet.....	.25 each,	2.00 per 10
1½	to 2 feet.....	.20 each,	1.50 per 10

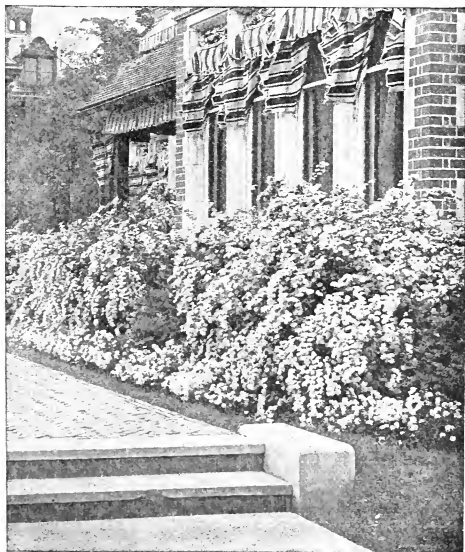
**Spirea Fontenaysii alba**—Upright in growth with small willow-like leaves and white flowers in finger-like panicles in summer.

**Spirea Golden (Golden Ninebark)**—A very striking variety, splendid for producing bright foliage effects or for screens, with its bright golden yellow leaves, changing in summer to bronze or yellow. Flowers very numerous in clusters along the branches.

**Spirea Reevesiana Double**—Very similar to Van Houttei, except the flowers are double, habit more upright though arching gracefully, and blooms later. The two make excellent companion shrubs.

**Spirea Van Houttei; Van Houttei's Bridal Wreath**—Beautiful at any season, when in bloom in early to late spring its dense drifts of white flower wreaths on arching branches are singularly graceful. The foliage is a pleasing dark green, bluish beneath, coloring beautifully in autumn. It makes an excellent informal hedge and a fine specimen plant. Withal a grand shrub and indispensable for lawn and landscape.

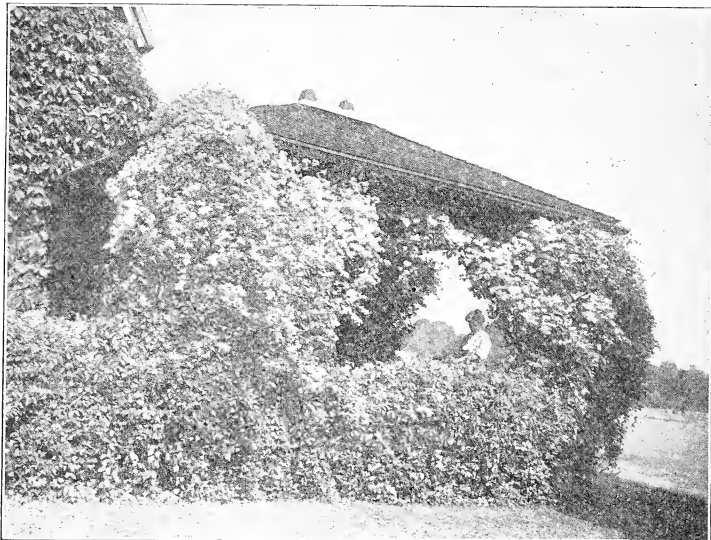
**Spirea Anthony Waterer**—Its dark crimson flowers, borne in large flat-topped heads, appear in great profusion all summer if cut off as they fade. Of dwarf habit, rarely exceeding 3 feet. The leaves at the tips of the new growth are often pink or light yellow. 25c each.



**Spirea Van Houttei**, a fountain of white in May or June



## Desirable Hardy Vines



The fragrance of *Clematis paniculata* resembles that of the English Hawthorn

Plant vines first of all, and plant them plentifully around new buildings. And plant them as soon as the builders are gone, quite independent of what other work may be intended and quite independent of the garden design. Whether the place is large or small, formal or informal, matters not at all so far as this detail is concerned. The vital thing is that every building must have vines upon it to impart that sense of oneness with the earth which is the first essential.—*Landscape Gardening Book*.

In addition you can with good effect follow nature's example, throwing a drapery of vines with a lavish hand over the unsightly. Perhaps there are old dead trees, yet to remove them would leave a gap not readily filled. Why not cover them with *Clematis paniculata*, *Wisteria* or *Trumpet Creeper*? In many gardens there are fences that may be made beautiful and at the same time serve as a screen. The bare pergola is neither useful nor attractive, but when vine-clad and shady it brings a tone and dignity into the garden which is invaluable. It is then by no means necessary to have it elaborate, rustic effects often being the best.

These are good outdoor grown vines and are not to be confused with the smaller plants selling at low prices. Five of a kind at the 10 rate. Planting information on page 48.

### **Akebia quinata**

A Japanese vine of great merit with dainty five-fingered foliage, and odd-purplish-blue flowers with three cup-shaped petals; well suited to porches because of the delicacy of the foliage; very free from insects. 15c each.

### **Cross Vine (Evergreen)**

A handsome climber with waxy evergreen leaves and reddish-orange and yellow trumpet shaped flowers about 2 inches long; a cross section of the stem presents a cross-form appearance, hence the name. 15c each, \$1.25 per 10.

### **Clematis**

Graceful free growing vines, well adapted for balconies, porches, etc. A well drained loamy,

fertile soil should be given them and it should be frequently enriched. In early spring cut away all weak branches and train on a support to prevent whipping in the breeze, as splitting of the bark is often fatal.

**Clematis Henryii**—Abundant, large, creamy-white, fragrant flowers, often 3 to 5 inches across. 35c each, \$3.00 per 10.

**Clematis Jackmanii**—Velvety purple; free flowering and the most popular of the large-flowering kinds. 35c each, \$3.00 per 10.

**Clematis Mad. Edouard Andre**—Large violet red; strong and vigorous. 35c each, \$3.00 per 10.

**Clematis paniculata; Japanese Clematis; Japanese Virgin's Bower**—One of the most beautiful hardy vines with its thousands of pure white



## DESIRABLE HARDY VINES—Continued

four petal star shaped flowers in large panicles, fairly covering the upper portions of the plant, in August or September, followed by silvery, feathery seed pods, remaining until winter; deliciously fragrant, resembling the English Hawthorn. A rapid grower quickly reaching a height of 15 to 24 feet and spreading out when trained on wires. Equally useful for planting among rock work and sloping banks; succeeds in almost any position; perfectly hardy. 25c each, \$2.00 per 10.

**Special—One each of above four Clematis for \$1.20.**

### Euonymus (Evergreen)

**Euonymus Variegated (*E. radicans variegata*)**—A very graceful evergreen vine with glossy waxy-like foliage rather larger than boxwood, rich green variegated with silvery white; it clings by means of rootlets and is particularly suited to covering northern exposures of brick or stone. Of very dense growth and covers the space smoothly. 20c each, \$1.50 per 10.

**Euonymus, Green (*E. radicans*)**—Like the above but without the variegation of foliage; excellent for low walls, gate posts and such. 20c each, \$1.50 per 10.

### Honeysuckle

**Honeysuckle, Halls Japan**—Almost evergreen; deliciously fragrant white flowers becoming yellow; blooms in summer and at intervals till fall; a very strong grower, reaching a height of 15 feet, excellent for the porch, a ground cover, and for covering a wall, stone fence or other object. 15c each, \$1.00 per 10.

**Honeysuckle, Monthly Fragrant**—Flowers bright red, buff inside. 20c each, \$1.50 per 10.

### Ivy

**Ivy, Boston or Japanese (*Ampelopsis Veitchii*)**—A graceful vine clinging closely by means of disc-bearing tendrils, leaves three to five-lobed, bright green in early spring becoming dark green and in autumn bright red and orange. The foliage withstands dust and smoke well. If planted when dormant should be cut back to within about 6 inches of the soil so that the new growth will cling from the bottom up. 25c each, \$2.00 per 10.

**English Ivy (*Hedera helix*)**—A grand high climbing evergreen vine with wax-like dark green

leaves of exquisite outline and beauty, usually 3 to 5 lobed; very hardy, clings closely, grows rapidly, and will soon cover an expanse of brick, stone or wood; best on northern exposures; when it attains age its broad heads of yellowish flowers are quite attractive; forms a splendid ground cover, especially in shady places where grass will not grow, at the bases of houses, between foundation and path, or as boundary lines, to which the long, pliant stems readily lend themselves. 15c each, \$1.25 per 10.

### Kudzu Vine

**Kudzu Vine**—Perhaps the most rapid growing hardy vine, and useful for quick effect, either for screens or covering buildings; very large, bold leaves; rosy-purple flowers, resembling the Wistaria, pleasingly fragrant. 20c each, \$1.80 per 10.

### Silk Vine

**Silk Vine**—A vigorous high climbing twining vine, reaching a height of 40 feet if afforded opportunity; handsome shiny deep green leaves; brownish-purple flowers; well suited for covering arbors or pergolas, trellis work and trunks of trees; thrives in any well drained soil; prefers sunny situations. 25c each, \$2.00 per 10.

### Trumpet Vine

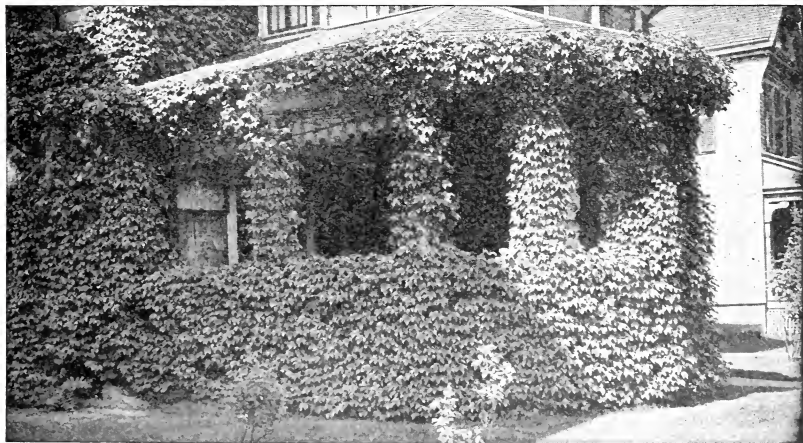
**Trumpet Vine (*Tecoma radicans*)**—Very showy with its clusters of large orange-red trumpet-shaped flowers in summer and effective almost anywhere if there is something to be covered—among rocks, over arbors, for brightening hedges or climbing over old trees or ruins. A stout, high climber, clinging by means of rootlets. 15c each, \$1.00 per 10.

### Wistaria

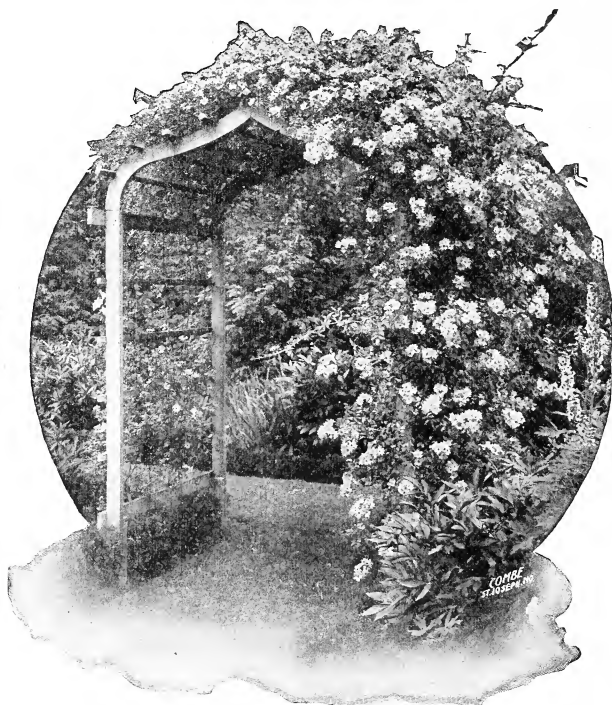
Wistaria are among the best of vines for porch, arbor or trellis. A very pretty effect is produced by training along the eaves of the porch, or following the eaves around the house, after the Japanese style. Wistarias will live in rather dry and sandy but prefer deep rich earth. Unless pruned when planted they are likely to be slow in starting.

**Wistaria, White**—An attractive and rapid grower with numerous pendulous clusters of white, pea-shaped flowers. 25c each, \$2.00 per 10.

**Wistaria, Purple**—The well-known variety with lilac-purple flowers. 25c each, \$2.00 per 10.



## Roses



**The Ramblers are hardy, vigorous and easily grown**

Anyone who has a piece of ground and sunshine can grow roses. The Ramblers are very hardy, of vigorous growth and valuable for porches, arbors, fences and screening unsightly views. The Hybrid Perpetuals are one of the most important groups. In color and fragrance they have no rival. They are perfectly hardy and easily grown, soon becoming large, vigorous bushes. They bloom profusely in June, and while not as constant bloomers as the everblooming class, if cut back for perhaps half their length immediately after the June bloom will give a fall crop.

The Everblooming roses are everywhere prized for their superb form, delightful fragrance, beautiful color and the fact that they bloom all summer. Of this class the Polyantha and China class are hardy except in the North. The Teas and Hybrid Teas require some winter protection (see page 48). The class is indicated by Pol. for Polyantha, T. for Tea, H. T. for Hybrid Tea.

It should be borne in mind that some varieties are dwarf while others are of vigorous growth, so it is impossible to supply all the same size.

### Hardy Ramblers and other Climbing Roses.

**Prices:** 25c each, 5 or more at 20c each, except as noted, for strong 2 year plants.

**Baby Rambler**—Not a climber; see monthly roses.

**Climbing American Beauty**—The same color, size and fragrance as American Beauty but of climbing habit, attaining a height of 15 feet; blooms freely, a well developed plant containing hundreds of blooms. 35c each, \$3.00 per 10.

**Climbing Baby Rambler**—A climbing form of the Baby Rambler, and said to be everblooming.

**Crimson Rambler**—Rich glowing crimson in large compact clusters in great profusion.

**Dorothy Perkins**—Beautiful shell pink finally becoming a lovely deep rose; full double flower, long pointed buds; crinkled petals, giving a fluffy effect; sweet scented; vigorous, growing 10 to 15 feet in a season, and blooms freely in immense clusters that cover the bush for several weeks.

**Lady Gay**—Delicate cherry pink passing to soft tinted white; fragrant. The effect of soft white flowers, cherry pink buds and deep green foliage is charming. A vigorous grower with large loose clusters, excellent for covering a trellis, fences, walls, etc.



## ROSES—Continued

**Philadelphia**—Pure deep rich crimson, more intense than Crimson Rambler, and blooms earlier; holds its dazzling color a long time; large, attractive clusters; very vigorous and unusually resistant to mildew.

**Prairie Queen**—An old time favorite; flowers bright pink, sometimes striped white, globular, full, compact, in showy clusters.

**Thousand Beauties** (Tausendschoen) — Soft pink passing through intermediate shades to carmine-rose in large bright clusters almost covering the light green foliage; fragrant, vigorous, with long stems; excellent for walls, verandas and summer houses.

**White Rambler**—White sometimes tinted blush; fragrant double flowers; large clusters.

### Hardy Hybrid Perpetual Roses

**Prices:** 30c each, 5 or more at 25c each, except as noted; strong 2 year plants.

**American Beauty**—Generally conceded to be the most grandly beautiful in size, form and color, the well-known American Beauty shade, delicately veined and shaded; very fragrant. 35c each, 3 for \$1.00, \$3.00 per 10.

**Conrad F. Meyer**—Large, perfect cup-shaped flowers; deep bright vivid intense pink with the penetrating fragrance of the old June roses; vigorous, a free bloomer and absolutely hardy.

**Eugene Furst**—Deep red shaded crimson; large, full, of fine form; blooms profusely.

**Frau Karl Druschki**—White American Beauty, Snow Queen—Splendid long pointed buds and magnificent blooms with large, waxy saucer-like petals; snow white without a trace of yellow or other tints; fragrant; a strong, vigorous grower. 35c each, 3 for \$1.00, \$3.00 per 10.

**Gen. Jacqueminot**—Shapely buds and handsome blooms of bright shining crimson, rich, brilliant, velvety and fragrant; a hardy, robust plant that blooms freely; the familiar "Jack" rose. One of the best for outdoor planting.

**Marchioness of Lorne**—Very rich rose, center shaded

vivid carmine; large, full, very fragrant; strong, vigorous; blooms freely.

**Nova Zembla**—A sport of C. F. Meyer, inheriting all its good qualities; white, sometimes flushed pink; full; richly fragrant.

**Paul Neyron**—Perhaps the largest of roses and one of the best hybrid perpetuals; deep, shining rose, full and double; very fragrant; a strong grower with few thorns; blooms several times a year.

**Prince Camille de Rohan**—One of the darkest roses, sometimes called black; rich, deep, velvety crimson, shading maroon; large, handsome, fragrant flowers; vigorous growth.

**White American Beauty**—See Frau Karl Druschki.

**Ulrich Brunner**—Cherry red of immense size and globular form with a strong, penetrating, pleasing fragrance; a vigorous, compact plant with long stems; constant in bloom during the growing season.

### Everblooming or Monthly Roses

**Prices:** Strong 2 year plants, 30c each, 5 or more at 25c each.

**Aurora**—Clear bright pink; full double to the center; very fragrant; one of the hardest Hybrid Teas.

**Baby Rambler** (Pol.)—Its large clusters of brightest crimson flowers almost hide the plant all summer. Flowers like the Crimson Rambler but only grows about 18 inches high.

**Blumenschmidt** (T.)—A sport of Mile. Francis Kruger, which it resembles in form and growth, but a deep golden yellow, the outer petals edged tender rose; a rich color; of vigorous growth and blooms freely.

**Clothilde Soupert** (H. Pol.)—All summer long it produces cluster after cluster of full double, fragrant, finely formed flowers, ivory-white shading to a bright silvery rose center. Perfectly hardy; of low, compact growth, but vigorous and sturdy; often the first freeze of winter finds it in full bloom.

**Etoile de France** (H. T.)—A fine rich brilliant shade of clear red-crimson velvet; large, of good form; long stiff stems; a good grower; fragrant; sometimes called Crimson Cochet.

**Etoile de Lyon** (T.)—Deep golden-yellow; long pointed buds and full rich flowers; very sweet; perhaps the strongest growing and freest blooming pure yellow Tea Rose.

**Gruss an Teplitz** (China)—Bright dark rich crimson passing to velvety fiery red; cup-shaped flowers in clusters; so free in bloom as to present a blaze of color.

**Helen Good** (T.)—Delicate yellow suffused with pink, each petal edged deeper; the color with its large size and exquisite form makes it unquestionably a grand rose of the Cochet type.

**Helen Gould** (H. T.)—Beautiful long pointed buds and full double flowers of a warm rosy crimson; fragrant; vigorous, blooms freely.

**Kaiserin Augusta Victoria** (H. T.)—Splendid large pointed buds and superb full double flowers; delicate creamy white; fragrance delightful.

**La France** (H. T.)—Beautiful silvery rose with pink shades, and over all a satiny sheen; large, full, symmetrical flowers with a delicious fragrance.

**Mdlle. Cecile Brunner** (Pol.)—The baby pink or sweetheart rose; handsome miniature buds and flowers in sprays of 3 to 5; color blush shading light salmon pink; fragrant; distinct and desirable.

**Mdlle. Francis Kruger** (T.)—A vigorous, constant bloomer with long pointed buds; long strong stems; color variable with the season



American Beauty is generally conceded to be the most grandly beautiful. There is a bush and a climbing form.





## ROSES—Continued

from coppery rose to yellow flushed pink always beautiful.

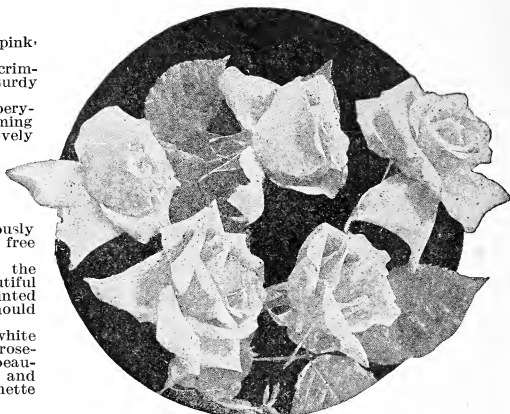
**Meteor** (H. T.).—Dark rich velvety crimson shading to maroon; strong and sturdy with long stems.

**Mrs. Aaron Ward** (H. T.).—Coppery-yellow in the half-open bud becoming golden yellow, and when fully open a lovely shade of fawn tinted pink; the total effect is an Indian yellow.

**Pink Maman Cochet** (T.).—There is no finer pink rose; buds large, full, firm, of perfect form and elegantly pointed, opening full perfectly double; rich rosy pink shaded silvery rose; deliciously fragrant; a sturdy, vigorous grower and free bloomer with long strong stems.

**White Maman Cochet** (T.).—Like the above and equally desirable, but beautiful snowy-white, the outer petals often tinted pink, only adding to its beauty; both should be in all collections.

**Wm. R. Smith** (T.).—Creamy white with soft blendings of salmon-pink, rose-pink and blush; long pointed buds and beautifully shaped flowers; a good grower and blooms freely; also known as Jeanette Heller and Maiden's Blush.



**There are no finer roses than Pink and White Maman Cochet**

## The Charm of Hardy Flowers

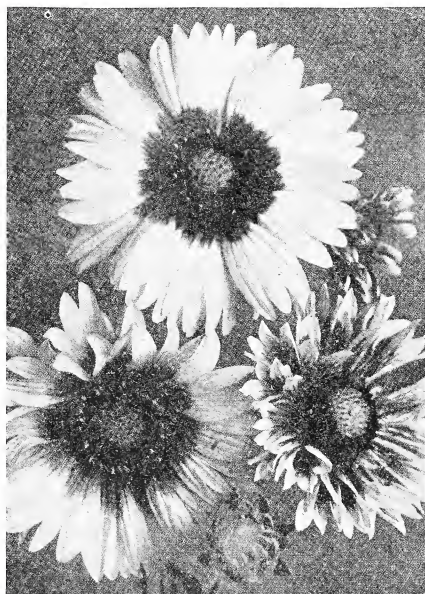
Much of the charm of the hardy garden lies in the varied and pleasant changes constantly taking place. Every day during the

growing season brings something new to interest and delight. In sheltered situations the Christmas Rose often blooms in December or January. Before the snow is gone the Crocuses and Snowdrops are in bloom. These are followed by the Hyacinths, Tulips and Narcissus. How eagerly we watch for the Bleeding Heart and the old crimson "Piney" of grandmother's garden, indispensable for its earliness and bright color. These are followed by the German Irises and the modern improved Peonies. Then comes the Japanese Irises, fragrant Lilies and a host of flowers until fall. Larkspur furnishes the necessary touch of blue. In its season Foxglove is the most striking thing in the flower garden. Even after frosts the hardy Chrysanthemums keep up a succession of beauty.

Haven't you noticed the luxuriant tangle around the dooryard of an abandoned homestead? Observation will reveal nooks of elegant foliage effects and the old neglected flower beds in luxuriant bloom. Why? Nature has had her gardener at work and crowded out the weak growers that had no place in the informal garden and placed in their stead strong growers and profuse bloomers that delight in the rich soil, sunshine or shade in which you find them. Why can't we flower lovers take a lesson from nature's garden? If we love roses and they do not adapt themselves to our garden, then plant these sturdy, hardy flowers that require so little care. Roses should find a place at every home, but that place is not the informal garden, but a location where they can be tended.

### Miscellaneous Hardy Perennials

These are so easily grown that almost without instructions a flower lover would give them proper care. Good garden soil spaded to a depth of one or two feet, enriched with well decayed manure or bone meal, light stirring of



**Blanket Flower blooms from June till fall**





## THE CHARM OF HARDY FLOWERS—Continued

the soil during summer and a winter mulch as directed on page 48 gives excellent results.

**Prices quoted are for good strong outdoor grown plants, not the tiny plants offered in cheap collections by parcel post. Six of a kind at dozen rate. Postage extra if by parcel post.**

### Adam's Needle

**Adam's Needle** (*Yucca filamentosa*)—A stately evergreen plant, forming an immense tuft or cluster of long, blade-like, needle-tipped leaves, from which rise a majestic flower stem 4 to 6 feet high, crowned with a profusion of large, drooping, creamy-white, bell-shaped flowers. Bold and imposing in appearance. Strong plants, 15c each, 80c per 10, \$6.00 per 100.

**Aquilegia**—See Columbine.

### Blanket Flower.

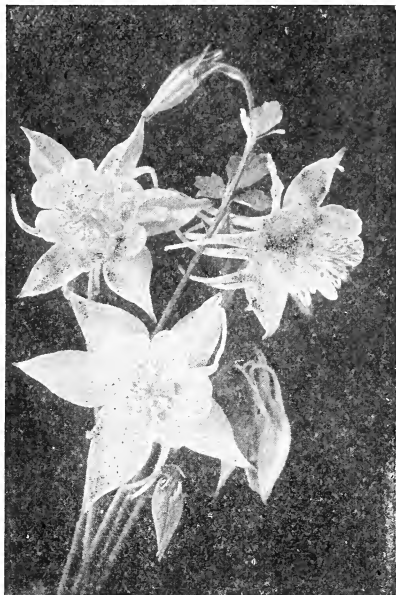
**Gaillardia grandiflora**—Blossoms from June till fall. Flowers 2 to 3 inches across, reddish-brown margined yellow. "Of easiest culture, not particular as to soil and position, they are absolutely dependable. They like a sunny position best, however, and make the best showing if massed in beds or borders. The flowers last a long time after cutting."—Adolph Kruhm, Garden Magazine. 15c each, \$1.50 per doz.

### Bleeding Heart

An old time favorite, rich in sentiment and association, with deep rosy red heart-shaped flowers nodding in graceful drooping racemes in the spring. It is perfectly at home in any part of the herbaceous garden and useful in shady situations. 15c each, \$1.50 per doz.



Japanese Bell Flower (*Platycodon*)



The graceful spurred Flowers of the Columbine

### Bell Flower, Japanese

**Platycodon**—Its beautiful large, broad, bell shaped flowers are very effective in the rockery or herbaceous border. The buds are inflated, from which it is sometimes called Balloon Flower. White and Blue. 15c each, \$1.50 per doz.

### Columbine

**Aquilegia**—One of the most beautiful and elegant hardy flowers. "The plants are of semi-round compact growth, over which the strong, upright flower spikes extend almost two feet. Many dainty small branches bear the ornamental long-spurred flowers in great profusion."—Adolph Kruhm, Garden Magazine. They work in well to the north of a house where the morning and evening sun reaches them. Strong plants to bloom the first spring, mixed colors. 15c each, \$1.50 per doz.

### Christmas Rose

**Helleborus niger**—A little snow beauty with flowers 2 to 3 inches across. The buds are tinted pink, when first unfurled a greenish-white, becoming pure waxy white, again tinted pink as they age and finally fade into green. In sheltered situations they often bloom through the snow in Dec. or Jan., under ordinary conditions more often in Feb. or March. Plant in good soil in semi-shade. Strong blooming size plants, 40c each, 3 for \$1.00.

**Chrysanthemums**—See page 32

## THE CHARM OF HARDY FLOWERS—Continued

### Coreopsis—Tickseed

#### **Coreopsis lanceolata grandiflora (Tickseed)**

"Truly the most popular yellow perennial. Two characteristics render it unique—the length of its blooming period and the enormous quantities of flowers which it bears in the course of a season. A dozen well developed plants will furnish all the yellow daisy-like flowers wanted from May to October. Coreopsis thrives well in sun or shade and the long-stemmed flowers make lovely bouquets."—Adolph Kruhm, Garden Magazine. 15c each, \$1.50 per doz.

### Daisies

**Shasta Daisy**—A flower that every one admires and every one can grow. The large, showy white flowers with a golden center are borne in great abundance on long stems during summer and autumn, always ready to give a quick bouquet. The first summer they bloom ten weeks or more, the next summer they bloom more profusely at one time but not for so long. Hence for a long period of bloom transplant each year, for a larger display during a shorter period let them become established. They are very attractive in the hardy garden or border and as an edging for a pathway. Excellent as a cut flower, lasting a long time in water. 12c each, \$1.20 per doz.

### Foxglove

**Digitals**—Their profusion of bell-shaped flowers drooping on tall spikes are one of the most striking things in the flower garden in early summer; of easy culture and thrive in partial shade. These



**The Chrysanthemum-like flowers of Rudbeckia Golden Glow are showy in late summer**

are the gloxinia-flowered variety, of more robust habit with longer racemes and larger flowers which open wider than the common variety. Fine strong plants to bloom the first summer; white, rose and purple, usually spotted. 15c each, \$1.50 per doz.

**Gaillardia**—See Blanket Flower.

**Hebeborus**—See Christmas Rose.

**Hemerocallis**—See Lily, Lemon and Day.

### Hollyhock

**Hollyhock**—Their colossal spikes of bloom, 5 to 8 feet high, produce bold and showy effects which cannot be secured with any other plant. Very effective among shrubbery, in the herbaceous border and along fences and boundaries. Double white, pink, red and yellow. 15c each, \$1.50 per doz. Single mixed, 10c each, \$1.00 per doz.

**Iris**—See pages 33-34.

### Larkspur

**Delphinium**—These free flowering plants can be depended upon for the necessary touch of blue in the hardy flower garden, producing tall spikes of dainty spurred flowers in June and at intervals till frost if cut as they fade. Phlox and larkspur make an excellent combination as they bloom alternately. Of easy culture. **Formosum**, a brilliant yet deep blue with white eye, growing 3 to 4 feet tall. **Belledonna**, unrivalled for persistent blooming, with large spikes of the delightful blue of the skies. Grows 2 to 3 feet high. 15c each, \$1.50 per doz.



**Coreopsis gives an abundance of yellow daisy-like flowers from May till October**



## THE CHARM OF HARDY FLOWERS—Con.

**Lemon Lily**

(*Hemerocallis flava*)—One of the hardiest and most delightful perennials and easily grown. Its fragrant, clear yellow lilies, 3 to 4 inches across, on stems 2 feet high, are produced very freely in early summer. 15c each, \$1.50 per doz.

**Lily, Orange Day**

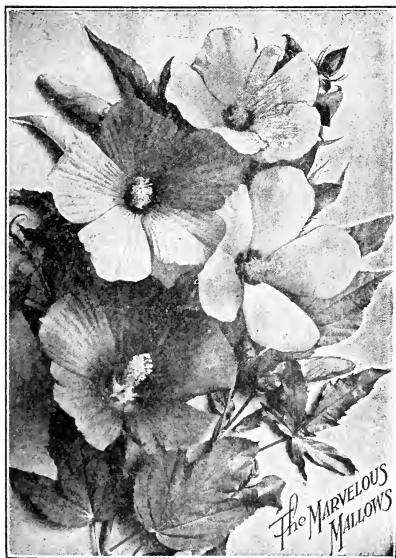
(*Hemerocallis fulva*)—The tawny orange flowers with wavy margins are produced very freely in latter summer on stems 3 to 4 feet tall. Named for the flowers closing at night. Grows luxuriantly in almost any garden soil, in moist places and in partial shade, soon forming large clumps. Blooms well even in dry weather. Single and double 10c each, \$1.00 per doz.

**Lily of the Valley**

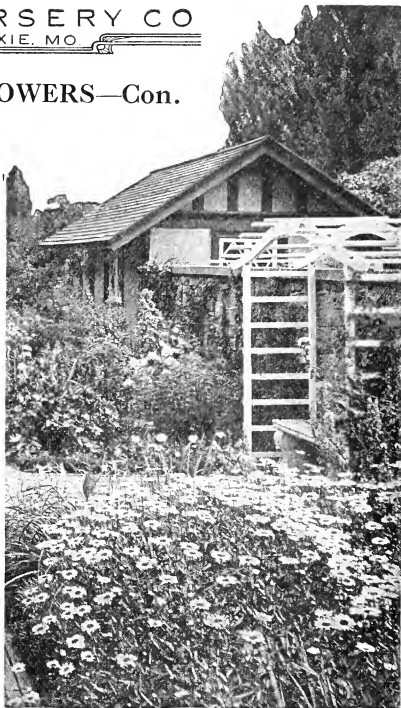
Will thrive in almost any kind of soil and produce its beautiful, modest, fragrant white bells in slender racemes in the out-of-the-way nooks, shady spots and corners where bolder plants would scorn to bloom. Prefers partial shade. Pips, 5c each, 50c per doz., \$2.50 per 100.

**Marvelous Mallows**

Six to ten weeks of flowers in rich shades of red, beautiful pinks, blush and white, beginning in July. Immense flowers, from the size of a pie plate to the size of a dinner plate, their great beauty cannot be described. In brilliancy of color and profusion of bloom they surpass all other summer blooming perennials. They bloom during hot, dry weather better than almost any other flower, making bushes 4 to 6, sometimes 8, feet high in a season, according to age. In winter cut off the old stalks to within 4 to 6 inches of the ground and they will come up



Marvelous Mallows give six to ten weeks of bloom

**Ten weeks of Shasta Daisies**

again in the spring. They like moist ground. We have found a soil of average fertility with good cultivation gives better flowers than very rich soil, which sometimes causes too much top growth. The one year will bloom the first summer, the two and three-year will give a grand display.

3 year size.....	50c each,	\$4.00 per 10
2 year size.....	35c each,	3.00 per 10
1 year size.....	25c each,	2.00 per 10
1 year size, mixed colors.....	20c each,	1.70 per 10

1 year, mixed colors, mail size by parcel post, prepaid, 20c each, 1.70 per 10

**Phlox**—See page 31.

**Peonies**—See page 35-40.

**Rudbeckia Golden Glow**

**Summer Chrysanthemum**—If there is anything that will stop it from growing and blooming it certainly is not poor soil, summer's heat or winter's cold. In latter summer it is very showy with its great clusters of double yellow chrysanthemum-like flowers on stems 4 to 6 feet tall. It will bloom abundantly the first summer and give a grand display the next. 10c each, \$1.00 per doz.

**Stoke's Aster**

**Stoke's Aster; Cornflower Aster (Stokesia)**—An excellent border or rockery plant growing 18 to 24 inches high, of easiest culture, succeeding in any open sunny position. From summer until fall it is covered with lavender-blue cornflower blossoms, 3 to 4 inches across. A good cut flower. There is also a white variety. Say which you wish. 15c each, \$1.50 per doz.

**Summer Chrysanthemum**—See Rudbeckia.





## THE CHARM OF HARDY FLOWERS—Continued

### Sweet William

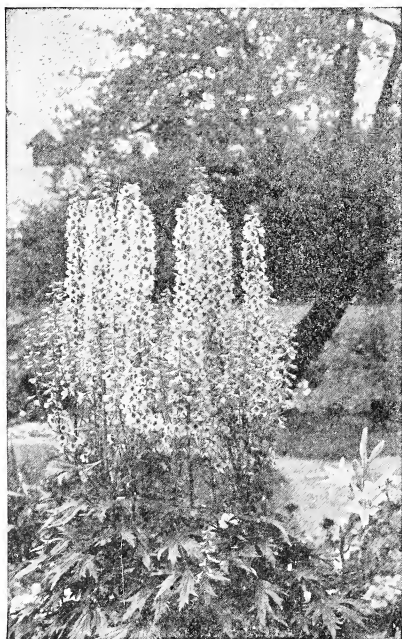
(*Dianthus barbatus*)—A well-known, hardy, free-flowering perennial, producing a splendid effect in beds or borders with their rich and varied flowers. Mixed colors, 15c each, \$1.50 per doz.

### Violets, Sweet Russian

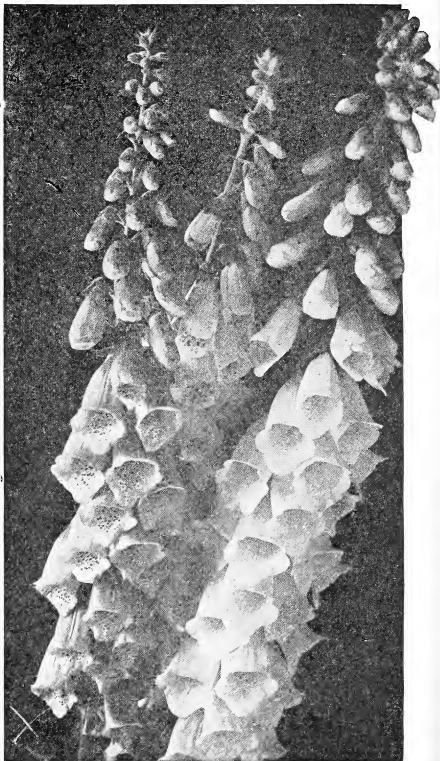
These give a good crop in early spring and again in the fall. Everybody loves violets, and everybody can grow this variety as it is of easy culture, the hardest of violets, and of strong growth; deep rich blue; fragrant. 10c each, 3 for 25c, \$1.00 per doz.

### Encourage the Children.

Encourage the children in their love for the beautiful. Give them a hardy garden. Teach them not only to love but to care for the flowers, and they will love them all the more. Haven't you often noticed how eagerly they watch for the first flowers of spring? How delighted they are to get their hands on whatever happens to strike their fancy! Haven't you observed their delight in picking the flowers in the woods, free to all who come? Then let them have a garden of their very own, where all summer long they will feel free to gather the flowers for themselves and their little friends. Let them early learn the joy of giving. Teach them that the greatest value of a gift is the thought bestowed with it. They will enjoy the giving all the more when they have helped grow the flowers.



Larkspur produces tall spikes of bloom in June



In early summer Foxglove is one of the most striking flowers in the garden

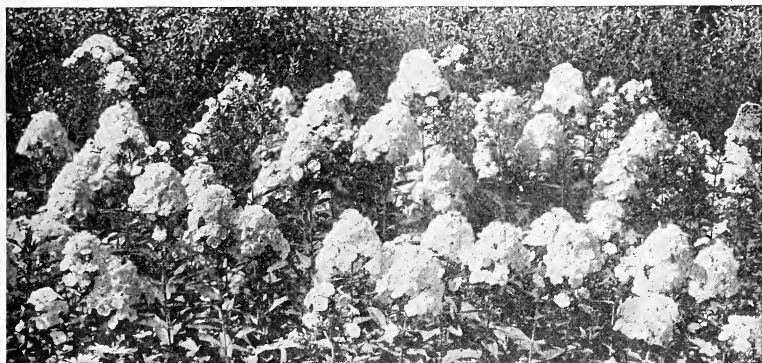
### The Mystery Man.

I wish I knew his name. All I know about him is that he owns a garden somewhere near Boston. Every morning during the summer he picks half a dozen bouquets of old-fashioned flowers with his own hands and brings them into town. One he gives to a girl at the soda stand in South Station, one to a manicurist in a barber shop, one to a stenographer, another to an apple woman on a side street—he scatters them all about, each bouquet accompanied by a word of cheer, a bit of a laugh, a wave of the hand—what a lot of fun he has. Maybe he is very rich and owns millions. Perhaps he is a clerk in an office somewhere. I really don't know. It makes one feel good to think about him, though.—The Blue Flower.





## Superb Hardy Phlox



Phlox give brilliant summer effects. Strong plants, \$1.50 per dozen

**B** RILLIANT summer effects may be produced with these easily grown hardy perennials. They are especially desirable for their great variety of color—pure white, delicate pinks, salmon, rich reds, crimsons and violet—and many are delightfully fragrant. They are excellent as single specimens or in the mixed border, but the most imposing effects are produced by planting masses of each color, say a half dozen to several dozen of a kind together. A charming border may be produced by beginning with pure white, then white with a pink eye, the lightest shades of pink and gradually working up to the deep reds. Phlox are admirably adapted for cemetery planting. They commence blooming in early summer, and if early, midseason and late varieties are chosen and the flowers cut off as they fade, will bloom quite late. They succeed in almost any position or soil, but give best results in a rich, mellow soil, well prepared. Plant 18 inches to 2 feet apart. After three or four years take them up, divide the clumps, remove any dead portions and replant. A winter mulch of old manure is a great benefit.

Great care has been used in preparing these descriptions, which have been written with the flower before us. The truss is the cluster of flowers, the floret the individual flower.

**Prices:** Strong field grown plants that bloom the first summer, 15c each, \$1.50 per doz.; \$11.00 per 100; except as noted. Our selection, assorted named varieties, \$1.25 per doz., \$10.00 per 100; mixed colors not named, 10c each, \$1.00 per doz.

**Athis**—Beautiful salmon-pink with carmine eye; floret medium large; very tall; strong stem.

**Bacchante**—A true tyrian rose, with crimson-carmine eye; large floret and truss; tall; strong.

**Beranger**—White suffused rosy pink with a distinct eye; large floret.

**Bouquette des Fleurs**—White overlaid pink with lilac center; bushy.

**Chateaubriand**—Rosy magenta; deeper center; large truss; tall; blooms freely.

**Clara Benz**—Brilliant carmine-rose, carmine claret eye; floret large; dwarf.

**Coquelicot**—Fine scarlet, crimson eye.

**De Miribel**—Purplish lilac, lighter halo; very large.

**Eclairer**—Rich crimson-carmine, large rosy-white, sometimes pure white star; excellent.

**Esclarmonde**—White suffused purplish carmine.

**Frau Anton Buechner**—White, sometimes veined and splashed carmine; floret immense; truss heavy. 20c each, \$2.00 per dozen.

**Independence**—An excellent large early pure white.

**Jeanne D'Arc**—An excellent late pure white; tall.

**Jules Cambon**—Clear magenta, large distinct white star in the center; rich and fine.

**La Vogue**—Beautiful pure mauve, aniline red eye; strong stems, large truss and floret.

**Miss Lingard**—The earliest in this list; pure white with faint lilac eye.

**Rheinstrom**—Salmon-rose, clear and bright; large, a good grower, and one of the best. 20c each, \$2.00 per dozen.

**R. P. Struthers**—Clear cherry-red with darker eye; there is salmon in the flower but it does not detract from its beauty; large floret, heavy truss.

**Peachblow**—Delicate peachblow pink; large truss.

**Siebold**—Clear salmon-scarlet, carmine eye.

**Stella's Choice**—A very free flowering pure white; large compact truss; excellent.

**Von Hochberg**—An ideal dark crimson, as velvety as Gen. Jackrose; the richest of its color, medium height, floret very large. 20c each, \$2.00 per dozen.



## Hardy Chrysanthemums



**Chrysanthemum Diana, Queen of Fall**

**I**N the dull November days when the frosts creep into the air and the garden is nearly destitute of bright colors these come forth in all their glory, filling the place of the early flowers and keep up the succession of beauty. Their flowers withstand ordinary frosts, lasting until they become wet and frozen after a rain or snow. They are excellent in the house, keeping a long time in water. True, their flowers do not reach the size of the huge tender chrysanthemums of the florists, grown in the greenhouse, one flower to the stem, but this is amply compensated for by their immense number, the beauty and grace of the clusters, their great diversity of color, their rugged constitution and the ease with which they may be grown. They are now grown extensively by the florists and are regularly found on the cut flower markets. Any good, rich, well drained garden soil is suitable. While hardy, as they root shallow, they should be mulched lightly with clean, bright straw after the ground begins freezing, which is all that is needed to carry them through the winter. Do not use material that will pack down and become soggy when wet. The large flowered varieties will give blossoms 2 to 2½ inches across, even larger if disbudded—that is, some of the buds pinched out—and the button type is very symmetrical and has a beauty all its own.

**Prices: Strong plants that will give a good display the first fall, 15c each, \$1.50 per dozen, \$10.00 per 100. Our selection, good assortment of varieties, 50 for \$4.75, 100 for \$9.00.**

**Cerise Queen**—Cerise; full double; medium size, medium tall; blooms freely.

**Dawn**—Very symmetrical; medium size, full double, tall; color difficult to describe, usually called daybreak pink, opening deeper and becoming lighter.

**Diana**—Large, pure white, very symmetrical; one of the finest and a profuse bloomer with good sprays.

**Ermine**—Bright orange scarlet; medium size, medium height; blooms freely.

**Golden Climax**—Very symmetrical; medium size, orange yellow flowers in beautiful clusters; fine, blooms freely.

**Julia Lagravere**—Crimson maroon.

**King Phillip**—Deep rose pink, good size, tall.

**Lillian Doty**—Large, beautiful formed shell pink flowers in abundance on long strong stems; early.

**Louis Rosney**—Opens deep, becoming lavender with lighter edges; large, tall, blooms freely.



## Irises

Perfectly hardy, easy to grow, they will reward you with a lavish wealth of bloom. Plant lots of Irises for their grand and royal colors and their beauty of form and texture. Mass them on the lawn or among shrubbery. Plant them along walks and drives, and in the herbaceous border. Naturalize them in wild and uncultivated places. Plant them for cut flowers, for which they are very effective. If cut in the bud and allowed to open in the house the colors are brighter. The German Irises precede and bloom with the peonies. Japanese Irises follow Peonies and precede Hydrangea Hills of Snow.

### German Irises (Fleur des Lis)

German Irises succeed in partial shade, but produce their best in full sun. They are not particular as to soil, will grow almost anywhere—but do best in well-drained, rich loam or garden soil, succeeding in quite dry locations. The beauty of their form and texture, shimmering in the sun, with their delicacy and wide range of colors, has given them the name "Orchid of the Garden."

**Prices:** 15c each, \$1.50 per doz., except as noted. Six of a kind at dozen rate.

**Black Prince**—Beautiful large flowers; very deep, rich; velvety royal purple; early; medium height.

**Celeste**—Large; standing petals pale lavender, falling petals deeper; fragrant; midseason; tall.

**Florentina**—White with a faint suggestion of lavender; large and fragrant; medium tall; early.

**Harlequin Milanais**—Standing petals white; flaked violet; falling petals rich violet, reticulated with white; large, fragrant, orchid-like flowers; blooms freely; tall; midseason.

**Honorabillis (San Souci)**—Standards golden yellow, falling petals yellow veined crimson-brown; one of the brightest yellows; blooms profusely; early to late; fragrant; medium height.

**Ingeborg**—Very large pure white flowers of exquisite form; early. 20c each, \$2.00 per doz.

**Lemon**—A beautiful lemon color; medium height.

**Madame Chereau**—Beautiful; peculiarly twisted and crimped petals, white elegantly frilled violet-blue; tall; slightly fragrant; midseason.

**Mozart**—Standing petals bronze-fawn; falling petals purple-fawn netted white.

**Orientalis**—Intense deep blue with narrow foliage; medium height; late.

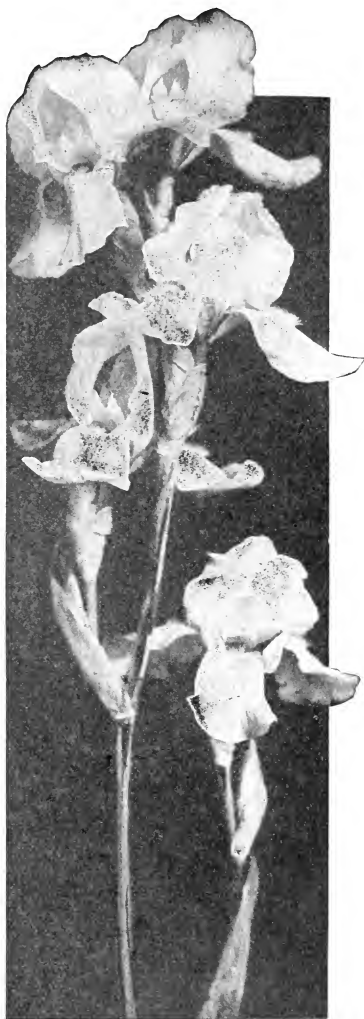
**Queen of May**—An unusual color; standards lilac-pink, falling petals lilac blended in white, total effect almost pink; a large, fine, very fragrant flower; midseason; tall.

**Pallida Dalmatica**—Very large flowers of a fine clear shade of lavender; very tall; fragrant; midseason. 20c each, \$2.00 per doz.

**San Souci**—See Honorabillis.

**Sappho**—Standing petals deep violet blue, falling petals dark velvety royal purple; large, fragrant flowers; tall; very early.

**Speciosa**—Standing petals lavender-purple; falling petals dark reddish-purple; fragrant, and blooms very freely; late.

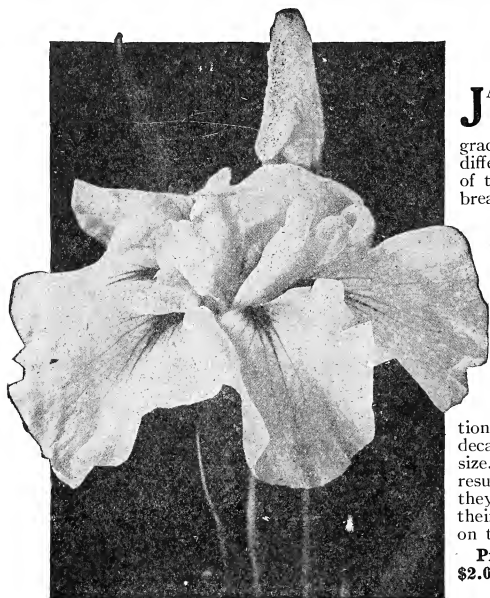


German Irises are easily grown

**Walthalla**—Standing petals blue, falling petals deep blue; very large and showy; medium height, 20c each, \$2.00 per doz.

**German Iris**—Mixed colors, 10c each, 75c per doz., \$4.50 per 100.





Japanese Iris

## Japanese Irises

**J**APANESE Iris is one of the most important of hardy garden plants. The foliage is tall, narrow and blade-like, stems slender and graceful, with several buds to the stem. They differ from the rest of the family in the flatness of the flower, shades of color, size of flower and breadth of petal. The blooms are very large and showy, exquisite combinations of color from snowy-white to deep blue-black, royal purple, rich violet, etc., often with a gold blotch, and markings so delicate and complicated as to be impossible to adequately describe.

Japanese Irises should be planted in full sun. Naturalized along the borders of streams or ponds where their beauty is reflected in the mirror below, they are very effective. Contrary to a quite general belief, they do not require such a situation. Any mellow loam, enriched with thoroughly-decayed manure, will produce flowers of wondrous size. While they do not demand it to give good results, they reach their highest development if they can be well watered just before and during their blooming period. Water must not stand on the roots during winter.

**Prices: Choice, mixed colors, 20c each, \$2.00 per doz., \$10.00 per 100.**

## Hardy Water Lilies

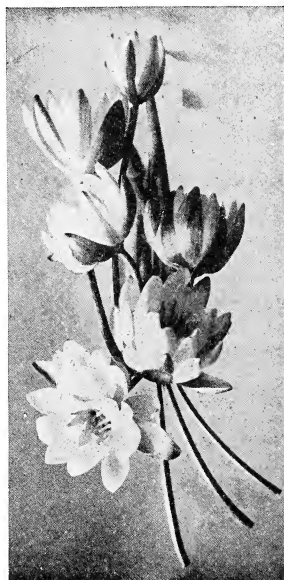
**A**LL that is necessary to have water lilies blooming all summer is water, sun and fertile soil. Every one that has a pond, stream or even room on the lawn for a concrete basin can have beautiful water lilies in abundance. There should be a foot of soil and a foot or more of water. The best soil is rotted vegetable matter from swamps or ponds, mixed with about one-third of well rotted manure or the top soil from an old pasture, mixed as above. Hardy water lilies need no care during winter if the water is deep enough so it will not freeze to the crown; otherwise drain and cover with leaves and boards.

**Choice mixed, of various forms and ranging in color from pure white with golden center through light to deep pink. 25c each, \$2.50 per doz.**

### Plant What You Want Where You Want It.

There has been so much made of the technical side of gardening—of color schemes, of planting in masses, of broad effects; scientific names of plants are administered to us in such heavy doses, that to make a garden has come to seem a formidable undertaking, very much as the literature on child culture is enough to appall the boldest parent; yet affection and a fair degree of intelligence are apt to do the trick; the planting impulse is one of the simplest, most natural, most elemental of instincts.

The simplest way to begin is to plant what you want where you want it. Neither is it so irrevocable a thing; if after a year or two the shrub you have set out offends you, it is not necessary to pluck it out and cast it from you—you can dig it up and transplant it to a less conspicuous position and have gained in garden wisdom by the experience.—Frances Duncan, in Garden Magazine.



Water Lilies

## Peonies are So Easily Grown

Hardy as the oak, Peonies are so easily grown that little need be said. Often, in neglected gardens, one sees large clumps that have flourished and bloomed for years. Yet they liberally repay all attention given them. Peonies thrive in almost any fair soil if well drained. Plant 2½ to 3 feet apart. Instructions on page 48.

### You Can Succeed With Wild Bros.' Pennant Brand Peonies

Of course you can succeed. They are grown to give results, and we fill your orders from just such high grade stock as we use for our own planting. We will not send out stock we would not want to plant ourselves. We know what Peonies need, because down here in the Ozarks we grow immense numbers, both for cut flowers and plants, and we succeed. Rich soil and cultivation more frequent and thorough than the successful farmer gives his crops—from 15 to 20 times during spring, summer and fall—make for superior vitality. PENNANT BRAND PEONIES are grown to supply the demand for the best. They are healthy and well grown, full real life and vigor.

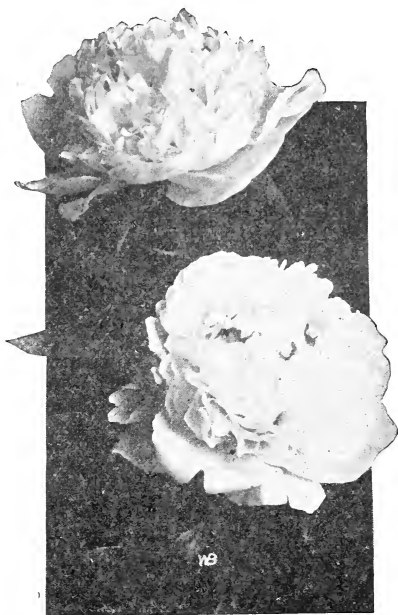
### Describing Peonies

The descriptions are made from careful observations of the flowers and plants. We have endeavored to convey as accurate an impression of the colors as can be done by words. The name and date in parenthesis is the name of originator and year introduced. Bomb, crown, rose, etc., refer to the type or form of flower, classified by the American Peony Society as follows:

**Semi-Double**—Those with several rows of wide petals, petaloids in various stages of transformation, and with stamens in the center and through the flower.

**Crown**—Wide crown petals are developed in the center with narrower, shorter petals forming a collar or ring around them, the guards and crowns often one shade and the collar another or a lighter tint.

**Bomb**—The central petals are uniformly wide and approach the Guards in form but distinctly



**Mad. de Verneville is literally packed with petals**

differentiated from them and form a globe-shaped center without collar or crown and without anthers.

**Semi-Rose**—Flowers that would be classed as rose but for an occasional pollen-bearing stamen.

**Rose**—The process of doubling is completed. The stamens are all fully transformed into evenly arranged wide petaloids similar to the guards. They may not always be indistinguishable from the guards, but if quite distinct it would be called a bomb. The line dividing the rose and bomb is thus seen to be quite an arbitrary one.

### GOOD, STRONG ROOTS.

The prices quoted are for good strong divisions from blooming plants. We plant divisions, and that is the rule among commercial growers. We do not offer by age as there is no standard size for the different ages. The terms one and two year, etc., means little; no more or less than the individual grower wants it to mean. After all, you have to depend upon the grower giving you your money's worth. We have seen Peonies from many sources and we know.

If you want something larger than our regular size we can furnish xx at 1½ times the price quoted, xxx at double the printed price. Whichever size you wish, we will send you your money's worth.

Six of a kind at the dozen rate. Large lots priced on request.

Peonies must be ordered in the fall or early in the spring. After February 15th we cannot supply all varieties.



## PEONIES—Continued

### Early Flowering or Officinalis Peonies.

This class is valued chiefly because they begin blooming 5 to 7 days before the earliest of the Albiflora section, and for that reason are used both for landscape work and cut flowers.

**Officinalis Mutabilis**—Large formed flowers, light pink. 30c each, \$3.00 per doz.

**Officinalis Rosea**—Deep purplish rose, large size and good form. 30c each, \$3.00 per dozen.

**Officinalis Rubra**—The old-fashion deed crimson "Piney" very early, hence much used for cut flowers and landscape planting. 30c each. \$3.00 per dozen.

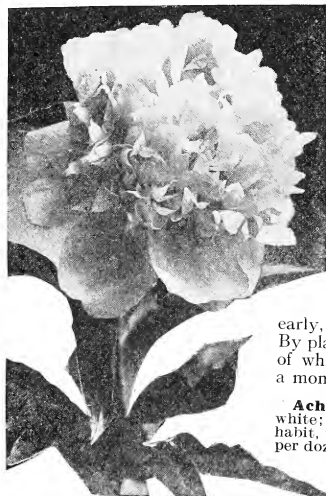
### Peonies, Albiflora Section

This class includes the finest of the Peonies. *Edulis* *Superba* begins blooming here about May 5 to 7th, immediately followed by *Mad. de Verneville* and by selecting early, mid-season and latest will furnish flowers for about 25 days. By planting the *Officinalis* for extra early and including *Grandiflora*, of which we usually have blooms June 1st or later, you can have a month of Peonies.

**Achille** (Calot, 1855)—Delicate shell pink, becoming blush or lilac white; quite fragrant; moderately large; blooms freely in clusters; upright habit, with long strong stem. Rose type; midseason. 25c each, \$2.50 per doz.

**Alba sulfurea** (Calot, 1860)—Broad white guard petals, center petals narrow, forming a full high cushion of sulphur white; fragrant, blooms just after *Festiva maxima*; a good grower; strong stem, excellent for cut flowers. 35c each, \$3.50 per doz.

the best of the light pink varieties; strong, erect, with long stems; blooms freely in clusters; late. 75c each.



**Mons. Jules Elie**

**Albert Crousse** (Crousse, 1893)—Delicate shell pink, some inner petals edged and striped carmine; immense, fragrant, bomb type flower, and one of

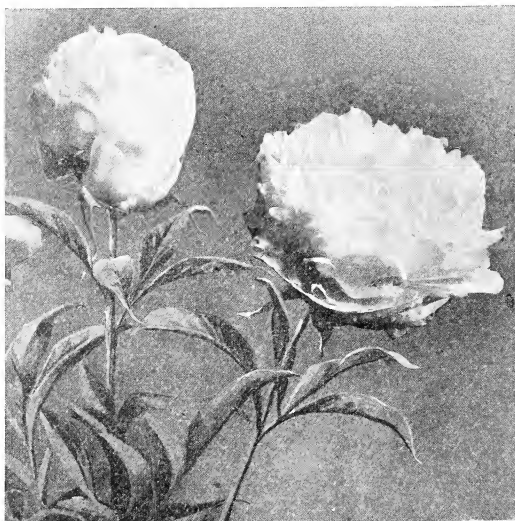
**Alexander Dumas** (Guerin, 1862)—Brilliant pink interspersed with white, salmon and chamois; a fragrant, pleasing multicolored variety; and one of the earliest of the Albiflora; strong, vigorous, with long stems, crown type. 35c each, \$3.50 per doz.

**Alice de Julvecourt** (Pele, 1857)—Lilac-white, prominently flecked with crimson; fragrant, bomb type; midseason; plants erect, medium tall, compact; blooms freely. 35c each, \$3.50 per doz.

**Auguste Villaume** (Crousse, 1895)—Immense, very full, globular rose type flower; rich violet rose; fragrant; growth strong, erect, tall; blooms freely, late. 75c each.

**Baron James Rothschild** (Guerin, 1850)—Guards silvery rose, center salmon, purplish-rose crown petals; crown type; midseason; blooms freely; medium dwarf but vigorous habit. 20c each, \$2.00 per doz.

**Baroness Schoeder** (Kelway, 1899)—Large, beautiful blooms with delicate tea-rose fragrance; delicate flesh, becoming white; strong, globular, compact, rose type flower; midseason; erect, compact, with large strong stems, blooms freely. \$2.50 each.



**Marie Lemoine is as indispensable as Festiva Maxima**





## PEONIES—Continued

**Beaute Francaise** (Guerin, 1850)—Pale lilac rose and cream white with prominent carmine flecks on center petals; fragrant; midseason; strong, upright habit, vigorous; crown type. 50c each, \$5.00 per doz.

**Beranger** (Dessert, 1895)—Clear violet-rose, guards clear rose; flat, compact, very fragrant rose type bloom; very late; plants erect, tall, growth strong. 50c each.

**Bride** (Terry)—Guards white striped flesh, center light straw, becoming nearly white; fragrant; informal bomb type; midseason; blooms freely in clusters; an excellent landscape variety. 25c each, \$2.00 per doz.

**Canari** (Guerin, 1861)—Guards white, barely tinted flesh, center sulphur white, becoming pure white; large flowers on long, strong stem; fragrant; bomb type, late midseason; blooms freely; excellent. 35c each, \$3.50 per doz.

**Candidissima** (Calot, 1856)—Full double; guards pure white, center tinged sulphur, becoming white; large fragrant rose type; early; a good grower and blooms freely. 35c each, \$3.50 per doz.

**Canista**—See Dr. Bretonneau.

**Claire Dubois** (Crousse, 1886)—Rich, clear, satiny pink edged silvery, with a silvery sheen; very large, globular flowers with very broad petals; center full, convex, tufted, petals incurved; midseason; fragrant; plant erect; vigorous, growth strong, long stems; a good bloomer and extra fine; rose type, late. 75c each, \$7.50 per doz.

**Crown of Gold** (Couronne d'Or; Calot, 1873)—A variety famous for its beauty. Snowy white, reflecting the golden stamens and lighting up the flower, the center petals beautifully flecked and bordered carmine; immense semi-rose type flowers; late; growth upright, vigorous, with very strong stems; blooms freely; the cut flowers keep well. 50c each, \$4.00 per doz.

**Delicatissima**—Clear, delicate shell pink; a good bud and large flower; strong stem; very fragrant; vigorous, blooms freely, a good cut flower variety; rose type; midseason to late; very similar to Floral Treasure but more erect and stronger in growth. 40c each, \$4.00 per doz.

**Delachei** (Delache, 1856)—Deep, rich, amaranthine purple with a crimson reflex; rose type; midseason to late; strong, vigorous, stems medium length. 40c each, \$4.00 per doz.

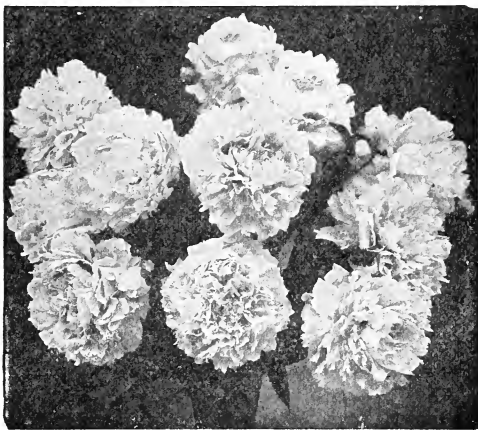
**Dr. Bretonneau** (Verdier, 1854)—A charming delicate silvery rose to silvery pink, center tipped cream, with an occasional crimson fleck; large full and one of the most fragrant; bomb type; midseason; a tall, vigorous grower, free bloomer with good stem, and much used for cut flowers. 35c each, \$3.50 per doz.

**Dorchester** (Richardson, 1870)—Light shell or hyacinth pink; large, full, compact, fragrant; rose type; very late. Somewhat dwarf but vigorous, compact, upright habit and blooms freely. 40c each, \$4.00 per doz.

**Duc de Cazes** (Guerin, 1850)—Broad, lively carmine-red guards, center rose; fragrant, crown type; midseason; growth strong, blooms freely. 25c each, \$2.00 per doz.

**Duchesse de Nemours** (Calot, 1856)—One of the best regardless of price. Superb ivory white with greenish markings near the center, becoming pure white without crimson markings; one of the most beautiful both in the half open bud and when full blown; fragrant; crown type; early to midseason; strong, vigorous growth with good stem; blooms very freely in clusters. Fine for the lawn and for cut flowers. 35c each, \$3.50 per doz.

**Duchesse de Orleans** (Guerin)—Large carmine-pink guards with center of soft pink interspersed with salmon; large, fragrant, bomb type flowers with long stem; midseason; strong, vigorous, blooms freely in clusters. 30c each, \$3.00 per doz.



**Crown of Gold, famous for its beauty**

**Duke of Wellington** (Calot, 1859)—Another indispensable variety and ideal for all purposes. Two rows of broad white guard petals, center very full, sulphur-white becoming pure white; fragrant; bomb type; late; keep well as a cut flower. A vigorous grower with tall, strong stems and abundant, very large flowers. 40c each, \$4.00 per doz.

**Edulis superba** (Lemon, 1824)—Beautiful deep rose pink flowers with a quite extraordinary fragrance; large and of good form; one of the earliest; crown type; growth strong, vigorous; blooms very profusely and for a long season; an extra good variety both for the lawn and cut flowers. 25c each, \$2.50 per doz.

**Emile Lemoine** (Calot, 1866)—Solferino red tipped silvery; fragrant; bomb type; late. 75c each.

**Felix Crousse** (Crousse, 1881)—An extra brilliant, rich, even, dazzling ruby red; large, globular, solidly and compactly built; bomb type; midseason; growth strong, vigorous, with long stems, and blooms freely in clusters; extra fine. 50c each \$5.00 per doz.

**Festiva maxima** (Mieliez, 1851)—For enormous size combined with wondrous beauty this variety has stood unsurpassed for 65 years. Pure paper white flaked with purplish carmine on some of the center petals; rose type; early; very fragrant; very vigorous, with very long, heavy stems; indispensable. You can't plant too many Festiva maxima. 35c each, \$3.50 per doz.

**Floral Treasure** (Rosenfield, 1900)—Bright delicate shell pink; large; fragrant; a free bloomer in clusters; vigorous, upright; rose type; midseason. Much like Delicatissima. 35c each, \$3.50 per doz.

**Germaine Bigot** (Dessert, 1902)—Very large, glossy flesh pink shaded salmon, some petals splashed crimson; crown type; midseason; strong, erect, stems medium long; blooms freely. \$1.00 each.

**Grandiflora** (Richardson, 1883)—After almost all other Peonies are gone Grandiflora bears its profusion of immense, very fragrant flowers, bright sea-shell pink tinged lilac; rose type; stems long. 60c each.

**Grandiflora rubra**—See Marechal Vaillant.

**Grover Cleveland; Tecumseh** (Terry)—Large, compact, brilliant dark crimson, very full and finely fringed; rose type; late; fragrant; a good keeper. 75c each, \$7.50 per doz.



## PEONIES—Con.

**Humei** (Anderson, 1810)—Large, compact rose type; clear cherry pink tipped silvery; cinnamon fragrance; growth strong with long stems which curve under the weight of the flowers; very late. 25c each, \$2.50 per doz.

**Jeanne d'Arc** (Calot, 1858)—Very broad soft pink outer petals, sulphur-white collar, blush center with an occasional broad central petal the same color as the guards, sometimes tipped and striped light crimson; fragrant; bomb to informal rose type; midseason; growth strong, good habit, blooms freely. Similar to Golden Harvest but taller. 40c each, \$4.00 per doz.

**Karl Rosenfield** (Rosenfield, 1908)—Large; brilliant dark crimson, plants erect, tall, compact, stems long; blooms freely. \$5.00 each.

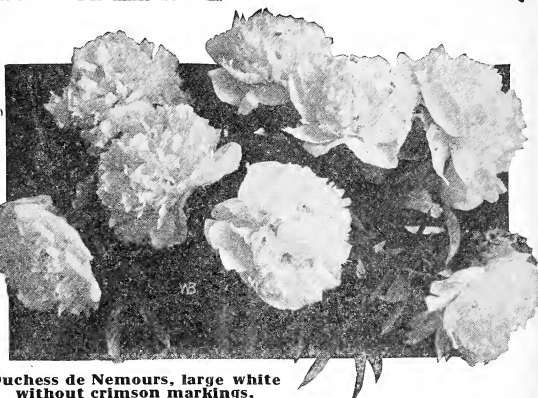
**Lady Anna** (Calot, 1856)—Soft flesh pink; medium size; flat rose type; midseason. 75c each.

**Lady Darnmouth**—Pure white, center sometimes tipped carmine; rose type; early; fragrant; plants strong, erect, blooms freely. 75c each.

**Lady Derby**—Fine waxy white, guard petals delicately tinted rose when first opening; very large; semi-rose type. \$1.50 each.

**La Fiancee** (Lemoine, 1898)—Very large, creamy white, center flecked crimson; crown type, with stamens which light up the flower; midseason; strong, vigorous. Should not be confused with the single La Fiancee originated by Dessert. \$8.00 each.

**La France** (Lemoine, 1901)—Very large, soft apple-bloom pink, the outer guards with a splash of crimson through the center, deepening at the base; rose type; deliciously fragrant; midseason; plant erect, medium tall to tall, strong and healthy; blooms freely; rare, very distinct variety, perfect rose type. \$5.00 each.



**Duchesse de Nemours, large white without crimson markings, blooms freely**

**La Rosiere** (Crousse, 1888)—Large flowers in clusters, yellowish-white with stamens intermixed; fragrant; semi-double; midseason. 50c each.

**La Tulipe** (Calot, 1872)—Blush-white becoming creamy-white, center petals tipped carmine, with carmine tulip-like markings on outside of guard petals; a large, fine, delicate, fragrant flower on long stems; semi-rose type; midseason; vigorous. 50c each.

**Madame Auguste Dessert** (Dessert, 1899)—Very large cup-shaped flower, exquisitely colored; glossy flesh pink, guards and some center petals edged crimson; semi-rose type; early to midseason; growth strong, blooms freely. \$1.50 each.

**Mad. Bollet** (Calot, 1867)—Compact, globular rose type bloom; clear light rose, silvery reflex, sometimes edged crimson; midseason. 25c each.

**Madame Chaumy** (Calot, 1864)—Petals broad, soft pink shaded bright rose, silvery reflex; central petals somewhat deeper than guards with an occasional crimson fleck, color somewhat splashed on; rose type; fragrant; blooms freely in clusters; midseason. 30c each, \$3.00 per doz.

**Madame Crousse** (Calot, 1866)—Large; white with crimson flecks on the crown; fragrant; medium strong, vigorous growth; blooms freely in clusters; crown type; midseason. 35c each, \$3.50 per doz.

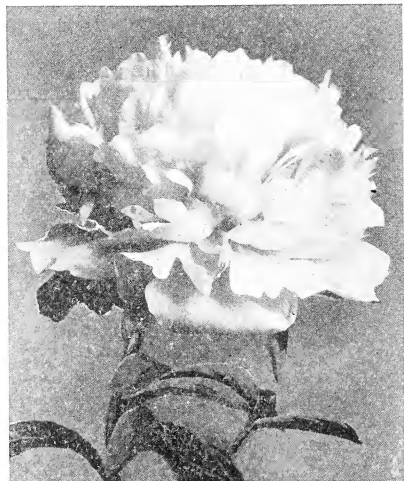
**Madame de Verneville** (Crousse, 1885)—An enormous producer of extra fine flowers; large, compact, and literally packed with petals; very broad white guards, center slightly blush, becoming pure white, noticeably flecked with carmine; delightful fragrance; bomb type; the earliest white of the Albiflora type; extra strong, vigorous growth of medium height with good stems; one of the finest both for cut flowers and landscape planting. 35c each, \$3.50 per doz.

**Madame Ducl** (Mechin, 1880)—A very large, very double, perfectly formed globular bloom, the center petals as beautifully incurved as in a chrysanthemum; bright silvery pink; fragrant; bomb type; midseason to late; vigorous; blooms freely; excellent. 50c each, \$5.00 per doz.

**Madame Emile Galle** (Crousse, 1881)—A large, finely formed, attractive flower; full double; soft lilac-pink, center shaped flesh becoming rose-pink; fragrant; midseason to late; crown type; growth strong, stem long; blooms freely; rare. 75c each.

**Madame Forel** (Crousse, 1881)—Glossy pink, slightly tinted violaceous, center tipped white, giving a silvery appearance; fragrant; rose type; late; medium tall, vigorous growth with spreading habit. 35c each, \$3.50 per doz.

**Madame Fould** (Crousse, 1881)—Compact, globular, very full, rose type flower; soft flesh, changing to white, slightly flecked with crimson; one of the largest and latest; growth strong, stems long. \$1.00 each.



**Claire Dubois, large globular satiny pink flowers**



## PEONIES—Continued

**Madame Gelsler** (Crousse, 1880)—A very large, attractive, very compact, globular bloom with somewhat cup-like center; glossy silvery pink shading to bengal rose at the base of the petal; rose type; fragrant; late mid season. 75c each.

**Madame Muysart** (Calot, 1869)—Very large, very compact, rose type bloom; rather deep pink or solferino red tipped silvery; guards streaked, center clear; fragrant; late; vigorous, stems long; blooms freely. 50c each.

**Mdlle. Julietta Dessert**—Rose type; deep crimson, silvery reflex; strong, vigorous, blooms freely in clusters; good. 50c each.

**Marcella Dessert** (Dessert, 1899) — Large blooms of admirable shape built up into a high, compact crown; total effect milk white; guards slightly flecked scarlet and splashed lilac, center slightly flecked crimson; delightful tea rose fragrance; growth strong, stems medium long; mid-season. \$1.25 each.

**Marechal Vaillant** (Calot, 1867)—Blood red; large, of good form, fragrant; rose type; very late; strong, rather spreading growth. 50c each, \$5.00 per doz.

**Marguerite Gerard** (Crousse, 1882)—Large; pale hydrangea pink becoming almost white, many central petals and even the guards have minute dark carmine flecks on the tips; fragrant; semi-rose type; late; medium height; plants of strong growth, stems strong, blooms freely. 50c each.

**Marie Jacquelin** (Verdier)—Large, globular; creamy white tinted flesh. When fully open golden stamens are disclosed at the center, suggesting the name Water Lily Peony. Usually classed semi-double but on well established, well cultivated plants the early blooms are almost full double while on newly set plants they are often almost single. Midseason; strong, vigorous, upright habit; blooms freely in clusters; extra good for landscape planting. 40c each, \$4.00 per doz.

**Marie Lemoine** (Calot, 1869)—Another variety that should be classed among the best regardless of price. Massive, very compact rose type blooms, with a somewhat flat center; ivory-white with an occasional carmine line on the central petals; fragrant; very late; medium height plant of strong, vigorous growth, with extra strong stems; blooms freely in every way. 40c each, \$4.00 per doz.

**Marie Stuart** (Calot, 1856)—Pale pink guards, a thick collar of narrow yellowish petals and a prominent pink crown flecked with crimson; fragrant; midseason. 35c each, \$3.50 per doz.

**Masterpiece** (Kelway, 1895)—Brilliant cerise of intense color; semi-rose type; fragrant; mid-season; large. \$2.50 each.

**Mathilde de Roseneck** (Crousse, 1883)—Very large, full double, rose type; deep flesh pink with occasional carmine markings; very fragrant; late; tall, strong. 50c each.

**Mireille** (Crousse, 1894)—Very large; rose type; very late; fine when weather conditions are favorable but does not always open well. \$1.00 each.

**Modeste Guerin** (Guerin, 1854)—Lively bright, very deep pink with a purplish cast (solferino red); bomb type flower; perfect form; midseason; very fragrant; medium tall plants of fine upright habit, vigorous with strong stems; a free bloomer, extra fine. 75c each.

**Mons. Bellart** (Delache, 1850)—Bright purplish crimson; medium to large; tall, blooms freely. 25c each, \$2.50 per doz.

**Mons. Dupont** (Calot, 1872)—Very large, well built, cup-shaped, semi-rose type bloom; ivory-white, outer petals streaked and inner splashed with carmine; fragrant; late midseason; growth strong, tall, upright with very strong stems; blooms freely in clusters. 50c each.

**Mons. Jules Elie** (Crousse, 1888)—Immense, globular, very full flower on long stems; fine, glossy flesh pink shading to deeper rose at the base, the whole flower overlaid with a silvery sheen; bomb type; very fragrant; early midseason; blooms freely; grand for all purposes. 75c each.

**Mons. Paillet** (Guerin, 1857)—Light violaceous pink with a pronounced silvery border, center shaded darker; large; fragrant; crown to bomb type; midseason; blooms freely; tall, strong, vigorous. 35c each, \$3.50 per doz.

**Nivea plenissima** (Makoy, 1840)—Sulphur-white becoming milk-white, guards slightly splashed crimson; fragrant; early; dwarf but strong upright growth; blooms freely. 50c each.

**Neemie Demay** (Calot, 1867)—Deep rose pink becoming flesh pink; large, full double, very fragrant rose type bloom; strong; vigorous; late mid-season. 30c each, \$3.00 per doz.

**Paganini** (Guerin, 1845)—Guards lively rose, center bluish white, yellow and salmon, with rose tuft; fragrant; blooms freely. 50c each.

**Petite Renee** (Dessert, 1899)—Bright carmine purplish guards; center petals shred-like; carmine streaked white, tipped golden Anemone type; midseason; good. \$1.00 each.

**Pottsi** (Potts, 1882)—Very dark, rich crimson with yellow stamens; typical semi-rose type; early; upright habit; medium height; blooms freely. 35c each, \$3.50 per doz.

**Pres. Roosevelt** (Holland, 1905)—Deep, rich, brilliant red; semi-rose type; mid-season. 60c each.

**Prolifera tricolor** (Lemon, 1825)—A really yellow peony; guards white lightly tinted pink, center deep sulphur yellow, crown petals same color as guards; fragrant. When first set the flowers are more nearly anemone type, becoming crown type when the plants are established; carpels decidedly crimson; strong stems; blooms freely; late. 35c each.

**Queen Emma** A very large, very full, fragrant, bright pink rose-type flower; plant of erect habit, compact, growth strong, blooms freely; an excellent cut flower variety as it keeps well and ships well; mid-season to late. 50c each, \$5.00 per doz.

**Queen Victoria; Whiteyll** — Broad guard petals; opens bluish, becoming white; fragrant; bomb type; globular, of good size; medium early; growth strong, stems medium long, blooms freely. 25c each, \$2.50 per doz.



Queen Emma keeps well



## PEONIES—Continued

**Peonies to Color**—White shades, double. 15c each, \$1.50 per doz., \$8.00 per 100.

**Pink Enchantress** (Origin unknown)—A large flower of flat rose type, opening delicate pink changing to white. Stems long, of medium height; midseason. One of the very largest and showiest of flowers. \$1.00 each.

**Pennant Brand Peony Mixture**—To supply an evergrowing demand for a No. 1 mixture we have thrown together the small plants left from the filling of many large and small orders of the best commercial varieties and have grown them on to merchantable size. Thus you are getting a mixture really worth while and not simply undesirable sorts so apt to be used in common mixed lots. 20c each, \$2.00 per dozen, \$10.00 per 100.

### PEONIES FLOWERS TO YOUR FRIENDS BY PARCEL POST.

Flowers convey a message words never can—a message of affection or remembrance of friends, of sympathy, of hope and cheer to the sick. The sentiment will be appreciated more than can ever be known. Nothing can be better than a neat box of Peonies. They can be sent almost any distance with the assurance that they will arrive fresh, fragrant, and in good condition. By parcel post prepaid at 75c, \$1.00, \$1.25 and \$1.50 per dozen, from May 10 to May 25.



**Mad. Ducl., with center petals beautiful incurved**

**Reevesii**—Rosy flesh, tinted salmon and chamois; good size; blooms freely; growth upright; stems long; medium late. 25c each, \$2.50 per doz.

**Rubra superba** (Richardson, 1871)—Deep glossy crimson without stamens; very large, very full rose type flower; fragrant; vigorous, long stems, blooms freely; very late. 50c each, \$5.00 per doz.

**Sarcxie**—A lustrous dark rich red received by us in a large shipment from Holland. It may bear another name abroad but it cannot bear a better one. Tall, thrifty, with a medium large flower on long stems; broad guards, tufted center of finely cut petals without stamens; very distinct and striking. \$5.00 each.

**Therese** (Dessert, 1904)—A very brilliant rich clear pink; rose type; very large; very fragrant; midseason; growth strong, erect, medium tall, compact. \$5.00 each.

**Wacht am Rhein**—A good early dark crimson; blooms freely. 30c each, \$3.00 per doz.

**Zoe Calot** (Mieliez, 1855)—Very large, very full globular bloom of an Enchantress pink; fragrant. Growth strong, upright, good medium height with very stiff stems which never droop; blooms freely, almost every stem producing a flower; late midseason. 50c each, \$5.00 per doz.

**Peonies to Color** (not equal to the choicest named varieties but extra good value)—Mixed shades of red, double. 15c each, \$1.50 per doz., \$8.00 per 100.

**Peonies to Color**—Shades of pink, double. 15c each, \$1.50 per doz., \$8.00 per 100.



**Zoe Calot, a very full, globular flower**

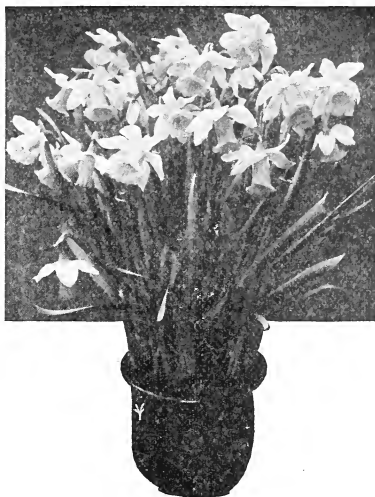


## Hardy Spring Flowering Bulbs

These are easily grown and give a fine display the first spring if you start with first class bulbs. Bulbs are nature's storehouse, from which the roots descend and the leaves and flowers ascend. You simply give them favorable conditions and they reward you liberally. These must be planted in the fall, and list will be mailed in August on request. This includes Tulips, Hyacinths, Lilies, Daffodils or Narcissus, etc.

### Flowers for the House.

Nothing gives such great returns with so little effort and investment as bulbs. They do not require a lot of fussing and will grow in a cool room—in fact, are better if it is not overheated. For this the Hyacinths are excellent. Perhaps the easiest grown are the Narcissus, and the Chinese Sacred Lilies. These are so easily grown that they should be had in bloom all winter. They must be started in the fall. If interested have us place your name on the mailing list for the bulb circular.



Narcissus growing in fiber

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We are often asked to suggest books that are comprehensive yet condensed. In conciseness of statement, in thoroughness with which the ground has been covered, the Biggle Books have won praise on every hand. Finely finished paper, beautiful illustrations, excellent press work and handsome cloth binding. The color work in the Orchard, Berry, Poultry and Cow Book has never been attempted before in any book selling at this price. While no book can be perfectly adapted to all sections or list varieties equally successful everywhere, these books contain wealth of information readily adapted to suit individual needs. Price 50c each, postpaid.

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If any proof were needed that the judicious planting of trees and shrubs about suburban homes increases their value, it is found in the public advertisements of such property. When we see suburban homes advertised for sale, if the facts in the case will warrant the statement, mention is pretty sure to be made, as one of the important recommendations of the place, that it is "well supplied with shade and fruit trees." It is a fact generally recognized that the tasteful and judicious planting of fruit and ornamental trees enhances the value of real estate more than an equal amount of money invested in any other way.—Sam'l C. Moon.



# Condensed Planting and Pruning Instructions

**Care Upon Arrival**—Unpack upon arrival, unless frozen or received during frosty weather, in which case see directions below. Don't expose the roots to sun and wind, but protect with moist hay or other material, even while hauling from place to place in the field. If stood in water, as is sometimes done, it should only be for a short time, and if the weather is hot and the buds are swelling keep the water off of the tender buds. If planting cannot be completed in a few hours the trees should be "heeled in."

**How to Heel In**—Select a well drained spot and dig a trench 12 to 2 feet deep, sloping to the south. Break the bunches, spread the trees on the sloping side with roots in the trench, work fine dirt thoroughly among them so no air spaces are left to permit drying out; fill partly and press firmly. Continue with other layers in this manner. Fill the dirt a little above the level, mound it and let it extend a little beyond the edge of the trench to turn water in case of rains. Leave a little loose dirt on top. In the North it is usually advisable to cover the tops entirely when heeled in in the fall for spring planting. Do not cover with straw as it often harbors mice. Plant as soon as conditions are favorable, to give them the benefit of all new root growth.

**If Frozen**—If frozen on arrival or received during frosty weather DON'T HASTEN THAWING but bury the package UNOPENED in well drained ground or place it in a cool cellar free from frost to thaw SLOWLY without exposure to the air. Treated thus trees will not be injured by freezing.

**If Dry**—If dry or shriveled through delay in transit, plunge half way to the tops in water, or better yet, bury in moist soil, covering half or more of the tops for 24 hours or more until they regain a fresh, plump appearance. They may then be planted. The tops of Evergreens, Strawberry and soft wooded plants must not be immersed or buried.

**Various Habits of Trees**—Do not expect all varieties to be of equal size and appearance as different varieties have different habits of growth. Some, of which Wealthy apple is an example, are short and stocky, while others, Jonathan for instance, are taller and more slender. Seckel and Garber pears are examples of two extremes. For this reason, when trees are graded by caliper or diameter, there will be some variations in height. If graded by height there will be a difference in caliper of different varieties. Such is unavoidable. Neither will all varieties be equally straight and symmetrical. As an example, the Damson and Wild Goose types of plums do not make as nice looking trees as the Japanese type. Nor should you expect all to be equally rooted. Apple is usually better rooted than peach, and both are better rooted than pear and cherry. The nurseryman would like all varieties to be of equal appearance, but they don't grow that way, and correctness of variety is of more importance than mere beauty at planting time.

**Preparing the Land**—Orchard land should be deeply and thoroughly plowed, harrowed and leveled, at least as well as for farm crops. The subsoil should be well broken up to increase the water storage capacity, unless it is sandy or leachy, when shallow breaking is usually advisable. A coat of manure plowed under in the fall is a good preparation for spring planting. Then a heavy disking in the spring will usually be sufficient. Land used for grain for several years without the addition of manure, cowpats or other green manuring crops will usually be deficient in humus and should be built up in one of these ways. Trees must not be in wet land. If it does not drain naturally tie-drain it, or at least ditch it. For lawn planting dig large, deep holes. If underlaid with hardpan, clay impervious to water or dense gravel, dig deep enough to give good drainage, or better dynamite it.

**Dynamiting**—Affords drainage, conserves moisture, allows the roots to go deeper and makes more plant food available. The charge should not throw the soil out but heave it for a distance of 2 or 3 yards around the charge. Test your soil with  $\frac{3}{4}$ ,  $\frac{1}{2}$  and a whole stick at 2, 3 and 4 ft. deep. Use a low percentage made specially for this purpose, such as 20 or 25% Red Cross Extra. Mining grades do not give as good results and freeze easier. If not familiar with its use write some of the powder manufacturers for information, as there are some dangers attending its improper use, especially when frozen.

**Dig the Holes** about a foot wider than the spread of the roots and deep enough to allow the tree to stand the same depth or not over an inch deeper than in the nursery row. Dwarf pear are an exception; set 4 to 6 inches deeper than in the nursery so they will become half standards and be longer-lived. Holes for orchard planting may be dug by plowing both ways and enlarging the holes at the intersection of the furrows. The orchard is usually laid out

in squares. The triangular method illustrated below may be used and gives about one seventh more trees per acre, yet places them equally distant in all directions:

```

X   X   X   X   X   X   X   X   X   X   X   X   X
X   X   X   X   X   X   X   X   X   X   X   X   X
X   X   X   X   X   X   X   X   X   X   X   X   X
  
```

**Planting** should be done when the dirt crumbles or works up mellow and is not so wet it becomes pasty and at a time when the temperature is above freezing. Take one tree at a time. With a sharp knife cut off smoothly all bruised or broken roots or root ends so they will callous and throw out new roots more quickly. Make a sloping cut on the under side. Some dip the roots in thin mud, about like thick cream. This is often beneficial if planted while moist. If it becomes dry soften it in water. Place the tree in the hole with the heavy side toward the prevailing wind. In sections where the winds are very strong it is usually well to lean it slightly in that direction. Spread the roots in a natural position. If any ends are turned up either widen the hole or shorten the roots or they will not readily start into growth. When filling the hole air pockets or openings must not be left as they permit drying. Put in some fine surface soil and work it thoroughly among and under the roots, filling every crevice so it comes in contact with every root. A slight turning motion will assist. As the soil is filled in, part at a time, tamp it quite firm with the feet. There is little danger of packing it too tight unless the soil is too wet. If absolutely necessary to plant when too wet, water to avoid making the soil pasty. If too dry, pour in a bucket or two of water, both for moisture and to assist in settling the soil. When it settles completely. Leave an inch or two of loose dirt on top. If not set firmly the roots do not take hold readily, may dry out, and may be loosened by the top swaying in the breeze.

A surface mulch of coarse manure keeps the soil moist, of more even temperature, and the trees are surer to live and make a better growth. Let it extend beyond the roots but not against the body which might conceal mice while they gnaw the bark. If the soil is poor dig a large hole and fill with good soil, which may be enriched with a moderate amount of well rotted manure. Fresh manure must not be mixed in when planting.

**Don't forget** to remove the labels or the wire may cut into the limb as it grows. Use stakes or a plat for the names.

**Pruning**—As it is impossible to retain all the root system when digging, all trees except evergreens should be pruned when planted, to preserve the natural balance between roots and tops and to properly shape and train the future growth. As a general rule, cut back the past season's growth half to two-thirds. Use a sharp knife and take off the limb or branch with a smooth, slightly sloping cut at a fork or barely beyond a strong bud pointing in the direction you wish the limb to grow. Long stubs if left die back and cause decay. Decide where you want the head to begin and prune accordingly, remembering that a limb does not get higher from the ground than it was when it started. Avoid having two limbs directly opposite, forming a fork which is likely to split.

Examine during the summer and rub off while very small any limbs starting where none are desired, thereby avoiding the removal of large limbs and leaving large scars in later years. If necessary to remove large limbs on old trees begin by sawing about a third of the way through on the under side. Then saw from above and the limb will break off instead of splitting down the trunk. Saw off the remaining stub near the tree, smooth the wound, and if an inch or over in diameter paint with raw linseed oil or cover with grafting wax.

While systems can be described set rules cannot be given. The reader will necessarily exercise his judgment and prune according to the needs of his locality. More specific instructions are given under the different tree headings.

Heavy pruning in winter tends to increase wood growth and develop the weaker parts by allowing them to receive more plant food. However, when pruning severely it is best to remove the weak branches entirely unless they are really necessary to shape the tree. Even then, very often vigorous new shoots will start which may be developed into main branches. If some of the new shoots which will make main limbs are growing too fast and outdistancing others, retard them by pinching out the tips, which will check the growth and tend to make them branch. This is called summer pruning. When practiced on bearing trees it tends to fruitfulness.



## Condensed Planting and Pruning Instructions—Con.

**Sun Scald**—In arid regions and any locality where there is much damage from sun scald newly planted trees should have their trunks protected, and it is important for large ornamental trees in all localities. The trunks may be wrapped with burlap, paper or straw, or a board may be set upright on the southwest side and stayed so the breeze will not sway it and scar the trunk. This last method is best since it does not make the trunk tender by shutting out the light and air. Whitewashing is often employed where sun scald is not severe.

**Watering**—During dry spells the season following planting water trees and plants *thoroughly*, in late afternoon or evening if the sun is hot. When you commence, keep it up till it rains. A sprinkling does more harm than good. Give the ground a good soaking but don't make it soggy. Follow with a mulch or stir the surface of the soil to prevent evaporation.

**Cultivation**—Young orchards especially should receive clean cultivation, beginning as early in the spring as the ground is dry enough to work. Keep the young trees growing vigorously. Cultivate after every rain and about every ten days until July, when it is time for the cover crop and to allow time for the wood to ripen before frost. Cultivate deep where there are no roots. Subsoil before planting and every two years. The year after planting, plow a strip about 4 feet wide where the trees are planted as deep as may be without disturbing the roots, subsoiling the balance. Later subsoiling should be over a narrower space until only one or two subsoil furrows are plowed midway between the rows. Most of the feeding is done near the ends of the roots, about the same as the spread of the branches, and here is where cultivation does most good. Do not cultivate bearing trees, the blossoms of which are easily injured by frosts, before they bloom. Many soils excellent for fruit are so rocky or hilly they cannot be cultivated. Prepare these with dynamite. Then secure a good sod of blue grass, timothy, clover or some such crop. A legume helps in supplying nitrogen. Mow regularly and mulch the trees. Some sow as often as the machine will catch the grass, others let it get a foot or so tall. An occasional application of potash is usually beneficial. If the only difficulty is that it is too steep for clean cultivation, cultivating half the ground each season, leaving alternate strips of sod, often gives better result. Do not pasture the orchard.

**Double Cropping and Fillers**—The first few years vegetables or small fruits, strawberries, asparagus or other crops that will not require cultivation after about August first may be grown between, NOT IN, the rows of the young orchard. Plant far enough from the trees so the singletree will not skin the trunks when cultivating. Do not use crops that sap the ground. A fertilizer is advisable when double cropping.



**"Heeling in" completed except shoveling in soil**

From Biggle Orchard Book, published by Farm Journal, Philadelphia.

If you will cut them out before they begin to crowd the permanent trees, peaches, cherries or young bearing apples may be used as fillers in the apple orchard. Plant them in the center of the square, or at the center of one side of the triangle if planted in triangular form. They do not require just the same spraying and treatment, but the methods can be adapted to each and paying crops secured before the permanent trees require all the space.

**Rabbits**—Protect the trunks from rabbits in winter until the trees are old enough so the hard bark is sufficient protection. Vener wrappers may be wired on. When the wrapper is removed watch that the wire is not left on as it might last long enough to cut into the bark with growth. Corn stalks in 2 foot lengths may be used. Or paper may be tied on with twine at top, bottom and center. It is best to remove the wrappers in the spring as they often harbor insects.

## SPECIAL NEEDS OF DIFFERENT TREES AND PLANTS.

### APPLES

Apples do best on a deep, rich soil, such as will produce good corn or potatoes, though almost any soil not wet may be used; if hilly, no matter. A slope is better than level ground. The finest apples grow on the higher land. Preparation consists mainly in deep, thorough plowing, harrowing and leveling. Plant 30 ft. apart, 48 trees per acre.

The advantages of the pyramidal form is that the loss of a main limb is not so serious and there is less liability to break with a heavy load of fruit. The advantages of the low open head, so popular for commercial orchards, is that all the fruit receives sufficient light and air for proper development, that there is more fruiting wood on a tree of a given size, that it is easier to pick, spray and prune. The low head also gives more protection from sun scald, one reason why trees are headed so low in the west. In the east they are headed considerably higher, in the central states the height is between the two. Regulate pruning by the shape desired.

For the pyramidal form prune back the side branches to form a cone-shaped top and allow the central leader to grow until it reaches a height of 12 to 15 ft. Then keep it cut back to that height or it will get too tall for convenient picking, pruning and spraying. Unless carefully trained, forks will form at the top and there will be long stretches of trunk without limbs. These should be spaced

further apart than with the open head, say 8 to 15 inches, to permit them to carry secondary branches.

For the open headed form, if a two year tree is planted out cut the central leader, remove all but three to five of the strong limbs well distributed about the trunk, and cut these back to within 6 to 12 inches of the trunk. Avoid having two limbs start at the same height. If there are not as many limbs as wanted the pruning will probably start new ones, which may be trained as desired. When planting one year apple, usually without branches, the top is cut out to form the head at the height desired. Allow 18 to 24 inches from the ground for the first limb, 15 inches or a little more for the head.

The first and sometimes the second summer there is a tendency for too many limbs to start near the top. Rub off while small any starting where none are desired. Pinch out the tips of the top limbs, if growing so fast they retard the growth of the lower ones. The following winter cut back the new growth a third or half to produce strong limbs. Slender growers require the greater pruning. The following winters cut back part of the growth at the ends of the limbs and branches. Excessive pruning starts too many branches, makes the head too dense and the tree slower coming into bearing. Most varieties bear on short spurs requiring one or more years to develop. Do not remove these in pruning bearing trees.

### PEARS

Pears thrive on many soils but a rather heavy loam or clay soil which retards rank growth is best. Prune about like apple. Cultivation and fertilizing are an advantage if not carried so far as to produce a rank growth which is more subject to blight. For this reason the pear orchard is often seeded down. Fertilizers should not be too rich in nitrogen.

"Pear blight" or "fire blight" is caused by bacteria which live over winter in diseased bark or as cankers on the trunk. From

these a sticky fluid containing bacteria exudes in the spring. Bees and insects may carry the bacteria to the flowers, so the fruiting spurs should be cut off of the main limbs to prevent blight being carried to the body. Do not cut them off of the smaller branches unless bearing too heavily. "Twig blight" occurs when the bacteria gain entrance at the tips. Cut back about a foot into sound wood and burn blighted twigs. Carefully prune out any cankers and disinfect the wounds with corrosive sublimate (poison), keeping the pruning tools disinfected.

## Condensed Planting and Pruning Instructions—Con.

### PEACHES

A sandy loam or gravelly soil is best, though the peach adapts itself to almost any well drained soil. The ideal location is a northern slope to retard early blooming, elevated so the cold air may settle away, lessening the dangers of late frosts, and good drainage so the trees will root deeply. As vigorous growth the first year is desired, the soil should have an abundance of humus. If deficient, a crop of cow peas the year before will supply both nitrogen and humus. Plant 16 to 20 ft. apart; 18 ft. is a good average.

The low, open head is best. When planting good sized trees cut out the central leader at 2 to 2½ ft., remove all but 4 to 6 strong branches well distributed about the body and cut these back to 1 to 4 inches, just beyond a strong bud pointing outward. It is usually best to cut small trees back to a straight stub and grow new limbs for the head. If large trees are cut to a stub the head will grow one-sided unless carefully trained. Unless watched too many new limbs may start at the top, making the head too dense. About June first pinch out any of these except those you wish to form the head. Examine later, correcting any excessive growth and training the limbs outward. Then, if growing vigorously, pinching out the tips will give a better growth of side branches.

This year's new growth of twigs gives next year's crop. If not watched most of the fruiting wood will grow at the ends of the limbs. Early each spring prune back the limbs enough to keep up a stocky, vigorous growth with twigs well distributed along the branches and

keep the center from becoming too dense. Thinning to prevent overbearing may be done by clipping back the twigs, which may be left till blooming time and not done if frosts reduce the crop. After the tree reaches the desired size, prune back the main limbs to about the same place each year, but avoid excessive pruning as it causes too late growth. If it becomes weak, indicated by slender growth, or too tall, cut back rather severely when there is a crop failure. If the wood is injured by severe cold, cut back into two or three year wood BEFORE growth begins.

The peach orchard, especially while young, should receive shallow cultivation till about July first, followed by a cover crop turned under in the spring. Cow peas are good. Use them at least every few years if the growth is weak. The fruit buds are more easily injured on weak growth.

Even though perfectly free from borers when planted, examine the trees each year, especially if near an old peach orchard. Gum usually indicates their presence. Between September and December, again in latter May or early June, dig the earth from the trunk, cut out any borers that may be found, cutting with the grain if possible, and replace the earth. A thorough spraying with lime-sulphur solution using about double the usual quantity of lime and a pound of arsenate of lead to 5 gallons, from a little below to 2½ ft. above the surface, when examining in the spring, helps repel the moths. Allow the wash to dry before replacing the dirt. The injury is less serious in later years if kept free from borers when young.

### PLUMS

It is usually considered that the European class prefer a rather heavy clay loam or at least are not their best on light, sandy soil, while the Japanese prefer rather lighter soil. The Wild Goose group is most successful on the rich, sandy lowlands, but has a wide range of adaptability. Plant 18 to 20 ft. apart, 20 ft. if a power sprayer is to be used. Several varieties should be planted, as some are not

good self-pollenizers.

Prune American and Japanese plums to an open head. The European may be pruned either way. When planting prune similar to peach but not so severely, and watch that too many limbs do not start near the top. Excessive pruning should be avoided but some is desirable. Plums bear on two-year wood.

### CHERRIES

Cherries will grow on thinner soil than most trees, though to obtain the finest fruit a deep, mellow soil of good quality is desirable.

It must be well drained and there the trees are long-lived. On wet soils they are not successful and are short-lived. You often hear of how long-lived and successful the cherries were that were planted in the door yards in the early days, and in almost every case you will find the secret in the fact that the dwelling was located on well drained ground. Plant 18 to 20 ft. apart.

Cherry pruning should be done with caution—as a rule the less the better, but the tree must be shaped while young. Some growers prefer to cut the central shoot when planting, cutting just beyond a strong limb so it will heal readily. Leave four or five main limbs to form the framework of the tree, but do not cut these back as the most active buds are at the tips, the lower ones

being very dormant. If a main limb starts a single shoot instead of sending out several branches, pinch out the very tip of the main limb to make it branch. Direct any later pruning toward securing plenty of fruiting surface. Crowding branches or those which will scar another should be removed while small.

Cherry trees are not naturally as well supplied with roots as apple and do not as readily form new ones, so it is important when planting to cut off smoothly any broken or bruised parts to make them start new roots more readily.

A young cherry orchard should be cultivated thoroughly, about like corn, until the trees are well established and growing vigorously, after which it is usually seeded down to clover or grass and left in sod. The feeding roots form most abundantly near the surface and cultivation breaks many of these.



**Isn't this worth working for?**

From Biggle Orchard Book, published  
by Farm Journal, Philadelphia, Pa.

### GRAPES

Grapes are not particular as to soil providing it is well drained. Many successful vineyards are on soil tending toward clay. And they may be seen thriving on soil so gravelly it looks as though nothing would grow. A location with good air drainage, free from late frosts, is desirable. Steep hill sides may be made to yield a good profit. For the home vineyard a southern exposure is preferable. Soil of average fertility is best. Well rotted stable manure may be used in moderation. Nitrogen to excess in any form causes too rank growth, and they will not bear so early and are more subject to mildew and other diseases than if making a moderate growth. Phosphate and potash are needed most. Wood ashes will supply potash. A good average planting distance is 8x8 or 8x9 ft.

If very long cut the roots back to 12 to 18 inches. It makes planting easier and the long roots make no growth of value if retained. Cultivate well, especially the first two years, to secure a

vigorous, even growth. String the wire on the side toward the prevailing wind when the trellis is put up, which need not be before the second year.

For the home vineyard the following pruning instructions, from "Home Vegetable Gardening" by F. F. Rockwell, McBride Nast & Co., publishers, New York, will give satisfactory results, but remember that in southern Missouri and farther south pruning should be completed before February first:

"Pruning is the all important factor in growing good grapes. Upon the correctness and regularity with which it is attended to, the certainty, size and quality of the crop will depend almost entirely. Give special attention, then, in trying to master the theory of grape pruning. In order to do this it is necessary to keep in mind two facts, as follows:

## Condensed Planting and Pruning Instructions—Con. GRAPES—Continued

**First Principle.**—The fruit is borne on wood of the same season which grows from last season's wood.

**Second Principle.**—Each vine can properly nourish and ripen only a limited number of bunches. This number may vary between 25 and 100, but it will be much better to keep it between 40 and 80, to be determined by the condition of the vine and by the previous year's work.

The system of pruning, then, should be as follows:

1. At time of planting, cut back to three or four eyes.
2. When the buds sprout, rub off all but the one or two strongest. Tie or stake up the "canes" growing from these.
3. In January or February of the following spring, cut the strongest cane on each vine back to 3 or 4 buds, and remove entirely all others.
4. In May or June, after growth has begun, rub off all buds but two on each cane. The two new canes should be tied securely, not tightly, to stake or trellis. They form the basis from which in the following seasons will spring the canes which bear fruit.
5. During the season, keep all canes that start, other than the two desired, rubbed off.
6. In January or February of the second spring, cut back the two main arms, left to grow the preceding year, to eight or ten buds each. All the new canes spring from these are left, and will bear on an average of two bunches each of fine, large fruit.
7. The following January or February, cut off all of previous year's growth except the three or four canes nearest the head of the trunk and cut these back to eight or ten buds each. These buds will, of course, furnish the fruiting canes for the third season.

8. Every spring in January and February, cut back all wood except three or four canes to eight to ten buds, which will furnish fruiting canes for that season.

For full details of the various styles of training reference must be had to works on grape culture. For the home vineyard, arbors, trellises, walls or almost any support may be used that is easily reached and pruned. About six feet above the row a single stout wire may be stretched to which the main trunk is supported and several arms tied along this or to another wire about a foot below. The fruiting canes, as they grow, are allowed to hang down and are kept untangled. During the season any extra buds starting on the trunk are rubbed off. In growing on walls the pruning principles given above should be kept in mind and followed as near as may be.

Uneven ripening of the fruit in the fall usually indicates that the vine is carrying too heavy a load. Thin out and top-dress with ashes. Next season prune more liberally.



**Two year apple pruned to open head**  
From Biggle Orchard Book, published by Farm Journal, Philadelphia, Pa.

## CURRENTS

They are extremely hardy so far as cold is concerned, but will not succeed when exposed to the hot sun of the southern states, where shade is particularly important. There the best results are often secured between orchard rows. Otherwise give them a northern exposure or partial shade, such as the north side of a fence or

building. Plant  $2\frac{1}{2} \times 3$  or  $3 \times 4$  feet. In the home garden they may be planted in almost any soil. Cultivate well but shallow; mulch heavily; manure freely. Prune out all wood over three years old, maintaining a continuous supply of one and two-year wood. They fruit on both new and old wood, at the base of one-year shoots and on short one-year spurs.

## GOOSEBERRIES

May be planted in the open field, though in the central states a northern slope is preferable. On the east and west coasts the lay of the land is less important. Given good soil, they will endure more shade than most fruit plants, often giving good results in

rather densely shaded city gardens. They succeed on many soils, but a rich, rather moist soil is desirable. Plant in fall or early spring as they begin growing early. Set  $3 \times 5$  or  $4 \times 5$  ft. They bear most freely on 2 and 3 year wood. Cut out the older branches as they become weakened, maintaining a continued supply of new wood.

## BLACKBERRIES

Blackberries thrive in almost all soils but are best in a strong, deep, well drained loam that retains moisture in dry seasons, tending toward clay rather than sand. Fertilizers should contain a liberal amount of potash. Too much stable manure or nitrogen causes a rank growth at the expense of fruit. Plant 2 to 4 ft. apart, rows 8 ft. apart. Clip off the tips of growing canes at 2 to 3 ft. high to

make a self-supporting bushy plant with more fruiting wood and to make picking easier. Cultivate frequently but shallow as breaking many roots starts a large number of suckers, making the row too thick unless cut out. A cane fruits but once, the second year. That is, this year's new canes bear next. Cut out and burn the old canes as soon as they are done fruiting.

## DEWBERRIES

Compared with blackberries, the cultivation of dewberries is less expensive, more convenient, and land can be used that is too wet or not fertile enough for blackberries. Prepare the ground the same as for corn, roll or drag well, and ditch or mark out the rows 4, or better, 5 ft. apart and plant, 2 ft. apart. Cultivate well the first year, shortening in the plants during the early part of the season to make them stocky, but allow them free growth the latter part of the season. After the first two plowings shallow cultivation is best. Discontinue tillage in August to stop rank growth and cause the plants to ripen up a solid cane which will withstand severe winters. The second and following years cultivate little, more to keep

out weeds and grass, as too much cultivation tends to increase growth rather than yield.

Renewing must be done every few years but losses you one crop, hence renew but half the field at once. After the field has become a mat of vines, mow half the patch closely just after the last picking. Allow the vines to dry and burn off when the wind is brisk enough for the fire to run rapidly. Harrow well, preferably after a light rain. Mark off the rows with a diamond plow and work up the middles well with a cultivator, beginning at first.

The above is the method used by commercial growers in the central states. Sometimes the canes are supported on a wire trellis, but this is usually unnecessary.



## Condensed Planting and Pruning Instructions—Con.

### RASPBERRIES



Peach pruned for open head. Central trees with spurs left. At left a small tree pruned to a whip. Right hand is pruned as large trees often are, but requires careful training to avoid a one-sided top and like center would be better. Courtesy Mo. State Board of Horticulture.

Before spring, if the plants made a good growth the previous summer, pull the soil from the middle of the rows up over the crowns for a depth of 4 inches, mixing in with the soil loose but finely cut loam or rotted sod so the shoots can come through easily. Then by cutting the stalks several inches below the surface you will have nice tender shoots that command high prices. After cutting is over level the ridges and let the tops grow. Cultivate to keep down weeds and maintain loose soil during the summer.

Deep soil that will retain moisture in dry weather is preferable, the lighter loams for the red varieties, the heavier for the black. Too great fertility is likely to result in too rank growth. Plant the black varieties 3 to 4 ft. apart in rows 6 to 7 ft. apart; the red 3 ft. apart in rows 5 ft. apart. Most blackcaps naturally throw out side branches and in such cases it is well to pinch out the tips when 2 to 3 ft. high, as with blackberries. The same pruning is advisable with red kinds that branch freely. Those that seldom branch, such as King, are not pinched. Cultivate thoroughly until midsummer, followed by a cover crop.

As a cane fruits but once, cut out the canes after fruiting and remove surplus new canes the same as for blackberries. If in hills leave 4 to 6 strong canes for each plant; if in rows, 2 to 4 to the foot. If at any time red rust appears dig out and burn the affected plants. Raspberries should always be mulched the first winter if planted in the fall.

### ASPARAGUS

Asparagus can either be grown in the garden, as a separate crop, or between the tree rows of the young orchard. Select good soil, plow or dig deep and pack firmly with a drag. Plant 10 to 15 in. apart in rows 4 ft. apart. Cover the crown 3 inches. Give good level cultivation the first year but cut none of the stalks that year. After frosts, cut off and burn the stalks to prevent rust and apply good *friable* manure.

### RHUBARB—PIE PLANT

The secret of success is well drained soil, a point often overlooked in giving cultural directions for this easily grown vegetable. Prepare it well, set 2½x4 ft., covering the crown 2 inches. Do not let water stand on the ground, especially when manure is freshly applied. While a heavy feeder it should have its fertilizer distributed over the year, not gorged with heavy applications which cause a fermentation disastrous to the plant. Top-dress in September and February with good manure. As soon as growth starts in the spring rake off the straw portions and work the finer parts in. Cultivate well. When a deep pit is dug and filled with manure it often drains poorly or is in a hard pan that holds water like a dish, causing fermentation. If during hot weather the growth begins to look quite yellow, remove any decaying stalks and cultivate shallow in and between the rows. Never cut the stalks as the portion left is likely to cause rotting. Pull them, taking few the

first year. In 4 or 5 years the plants will begin to get too thick. Take up, divide and replant.

Rhubarb is easily forced. In autumn after killing frosts take good strong roots, place in a single layer on top of the ground, cover with enough earth to protect from the air, and allow them to freeze. After that take them to a shed or cover with litter to prevent alternate freezing and thawing if not ready to force at once. They may be forced in a cool dark cellar, a hotbed, or under benches in a greenhouse. Fill all spaces between the clumps with soil to prevent evaporation. When growth starts they must have an abundance of moisture. The temperature may range between 45 and 75 degrees. The lower, the more time required, but the quality is better and yield greater. If heat is required a lantern will often be sufficient. Light is not essential. If grown in the dark the stalks will often be an attractive cherry color. Forced roots are worthless for planting out.

### SHADE TREES

The general directions for planting and pruning at planting time apply, except that usually the central leader is not cut back severely, often not at all unless to make the head more dense. Do not remove the leader of Pin Oak as it does not readily start a new one. If the main pruning to shape the tree is done while young little annual pruning will be required when older. Start the main limbs at the height desired, to avoid removing large limbs later. If the limbs on small trees are lower than you wish, defer their entire

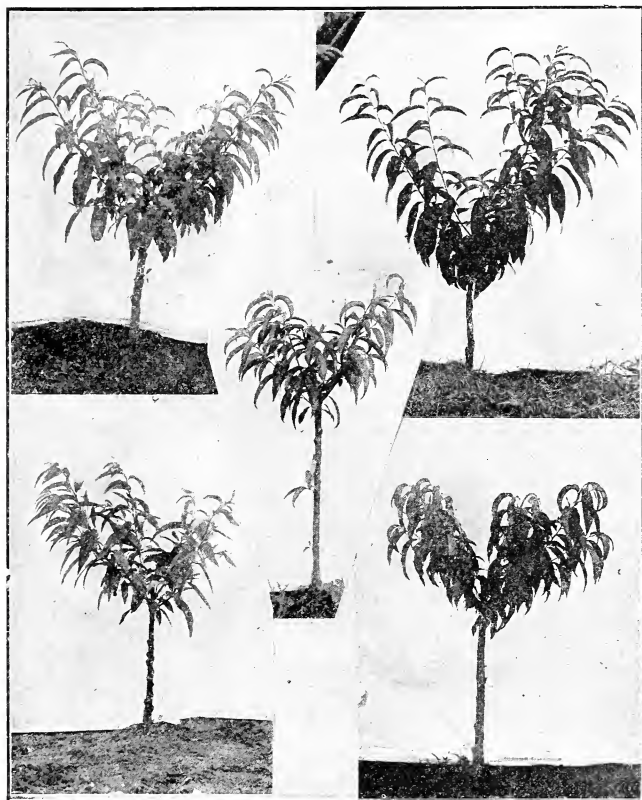
removal until new limbs start higher. Protect the trunks of large-trees, at least the first winter, as directed under the heading "Sun scald." If planted along graded streets from which the top soil has been removed, or if the soil is poor, dig a large hole and fill with garden soil or rich dirt. If underlaid with hardpan loosen it with a crowbar to give drainage, or better yet, with dynamite as previously directed. Otherwise it often holds water which becomes stagnant and injures the tree.

### EVERGREENS

Take special care to prevent exposing the roots to sun and wind more than necessary, as the sap is resinous and if it hardens will not revive. Firm the earth well and leave no air pockets which permit drying out. Evergreens are sometimes shipped with a ball of earth sewed in burlap. We have secured best results by removing the burlap when planting. Keep the earth well stirred about the roots, at least for the first year or two. Juniper, most Arborvitae,

including Biotas, Cedar and that class of evergreens, may be pruned or sheared to regulate their shape or make them more bushy. Pine and spruce may have their growth regulated somewhat by pinching out the tips of the new growth to force the growth into the side shoots, but this should not be done unless necessary and the pruner must watch carefully that he does not cut back into two-year wood where he wants new limbs to start.

## Condensed Planting and Pruning Instructions—Con.



This cut shows good heads on peach trees where 4 or 5 spurs are left. Note that the center has been trained to an open head. — Courtesy Missouri State Board of Horticulture.

## SHRUBS

Observe the general planting instructions previously given. Cut back about one-third when planting. Little pruning is required in later years except to remove weak branches, prevent straggling growth or the bush becoming too thick, and to keep up a supply of flowering wood. Shrubs blooming before midsummer, hence on old wood, such as Deutzia, Golden Bell, Lilac, Mock

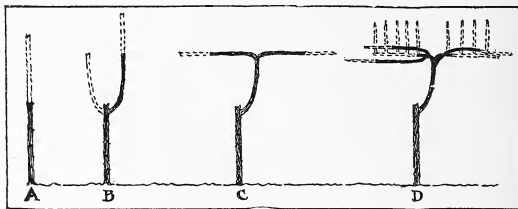
Orange, Dogwood and Spireas *Prunifolia*, *Thunbergii* and *Van Houttei* should be pruned after blooming or the quantity will be much reduced. Those flowering after midsummer hence on new wood, such as *Althea* and *Hydrangea paniculata grandiflora*, should be pruned in the spring. Do not prune *Weigela* severely, *Thunberg's Barberry* not at all unless grown as a hedge or it is making a straggling growth.

## Condensed Planting and Pruning Instructions—Con.

### ROSES

Roses may be grown in any well drained soil that will produce fair grain or vegetables. For best results a rich, deep clay loam is desirable. If of a fibrous character so much the better; if not some humus should be added in the form of thoroughly rotted manure or leaf mold. If this is not available the next best fertilizer is finely ground bone. Select preferably a location protected from the force of strong winds. Do not plant by large trees which sap the ground and shade them unduly or where they will be overshadowed by buildings or shrubs, though some shade during the heat of the day is beneficial. Spade the ground 2 ft. or more deep. To secure a better root system some tea and hybrid tea roses are budded. This can usually be told by the main trunk or budded part of the plant growing out in a curve from the upright stock which is cut off just above the bud. Plant this curve 2 or 3 inches below the surface and there should be little or no trouble from sprouts. If such appear the seven leaves will distinguish them from the five leaves of the everblooming and such sprouts should be removed.

Teas and Hybrid Teas require some winter protection by covering with evergreen boughs, coarse straw or leaves. Do not apply before frost or so as to exclude air. The object is only to give



Pruning Grapes: Dotted portions should be cut back—A, when setting; B, the next winter; C, a year later; D, third winter and after. Horizontal branches may be trained on wire.—From Home Vegetable Gardening.

sufficient protection to prevent rapid alternate freezing and thawing.

Pruning.—Climbers should only have the weak branches cut back in early spring and any straggling tips shortened in. Bush roses should have the weak branches cut out in early spring and the strong branches cut back to leave 4 or 5 strong eyes. Cut back weak growers severely, strong growers moderately. Do not allow the flowers to fade on the everblooms, but cut regularly with good stems and it will encourage new growth and more flowers.

### VINES

When planting about the house, remember that the dirt coming from the foundation is often the poorest. Remove it to a distance of 3 ft. and a depth of 2 ft. Fill with good garden soil mixed with

well rotted manure or leaf mold. It should be rich but not heavily manured. Ivy and other vines clinging by means of tendrils, if sent out with long tops should have their tops cut back as it is the new growth that clings.

### PEONIES

Peonies thrive in almost any soil but are best in a deep rich loam, moist but *well drained*. If good and rich, use manure as a mulch only. If poor, thoroughly mix in about one-third of *well rotted* manure or a little finely ground bone, adding a little river sand or fine gravel if inclined to be sticky or heavy. Fresh manure **MUST NOT** be mixed in the soil. Dig 1½ to 2 ft. deep; plant 2½ to 3 ft. apart, 2 ft. if in rows for hedges. Cover the eyes or buds 3 inches but do not pack the soil hard. Mulch the first winter with coarse strawy manure after the ground begins freezing, to prevent

the frost lifting the plants out. Each winter scatter a half bushel of ordinary manure or much less of concentrated fertilizer around each plant for a distance of 2½ ft. square, for fertility. After hard freezing is over remove the coarse parts and stir the finer in, taking care not to disturb the buds just beginning to appear. Cut off and burn the tops each November. Cultivate well, especially the first two summers. When a clump gets too large, shown by smaller and fewer flowers, dig up, divide and replant in a new place in the fall. Here Peonies do best in full sun, though they do fairly well if not shaded more than half the day.

### IRISES

Prepare the soil as for Peonies and plant the same depth they stood in the nursery, usually shown by the earth marks on the stalks. German Irises succeed in partial shade but are best in full sun. They grow almost anywhere but are best in a well drained

rich loam or garden soil, succeeding in quite dry locations. Plant Japanese Irises in full sun. Any mellow soil enriched with *well rotted* manure and well cultivated gives fine flowers. Water well just before and while blooming. Water must not stand on the roots during winter. Mulch same as Peonies.

### MISCELLANEOUS PERENNIALS

Prepare the soil as directed for Peonies. As a rule those sent out without green tops should have the crown barely covered. When they have green tops the earth mark on the plants or white portion will generally indicate the depth. Follow any special directions in the catalog. To prevent the frost lifting them out, all fall set plants should be mulched the first winter, for which new, bright straw is unexcelled, as it does not pack. After frosts, usually mid

November, cover 2 or 3 inches, using brush if need be to keep it in place. Straw manure may be used between the plants, but if placed over the tops of such plants as Chrysanthemums and Foxgloves they rot. These two plants should be mulched each winter and it is a benefit to almost all perennials.

Acknowledgment is made to Prof. W. H. Chandler, formerly of the Missouri Experiment Station, and Home Vegetable Gardening.





**65 Million Reasons  
Why It Will Pay  
To Plant More Trees**

## 65 MILLION FEWER BEARING APPLE AND PEACH TREES THAN IN 1910.

Washington, D. C., July 1—According to the census report, there were in 1920 about 115,250,000 bearing apple trees in the United States, a reduction of 36,000,000, or nearly 24 per cent from the number reported in 1910. Apple trees not of bearing age numbered 36,000,000 in 1920 and 65,750,000 in 1910, showing a decrease of 45 per cent.

There was a large decrease also in the number of bearing peach trees. The total was 65,500,000 in 1920 compared with 94,500,000 in 1910, a decrease of 30 per cent. Peach trees not of bearing age numbered 21,623,000, slightly more than half the number reported in 1910.

Great changes have occurred in the apple raising industry in various

states, as shown by the number of bearing trees reported in leading states:

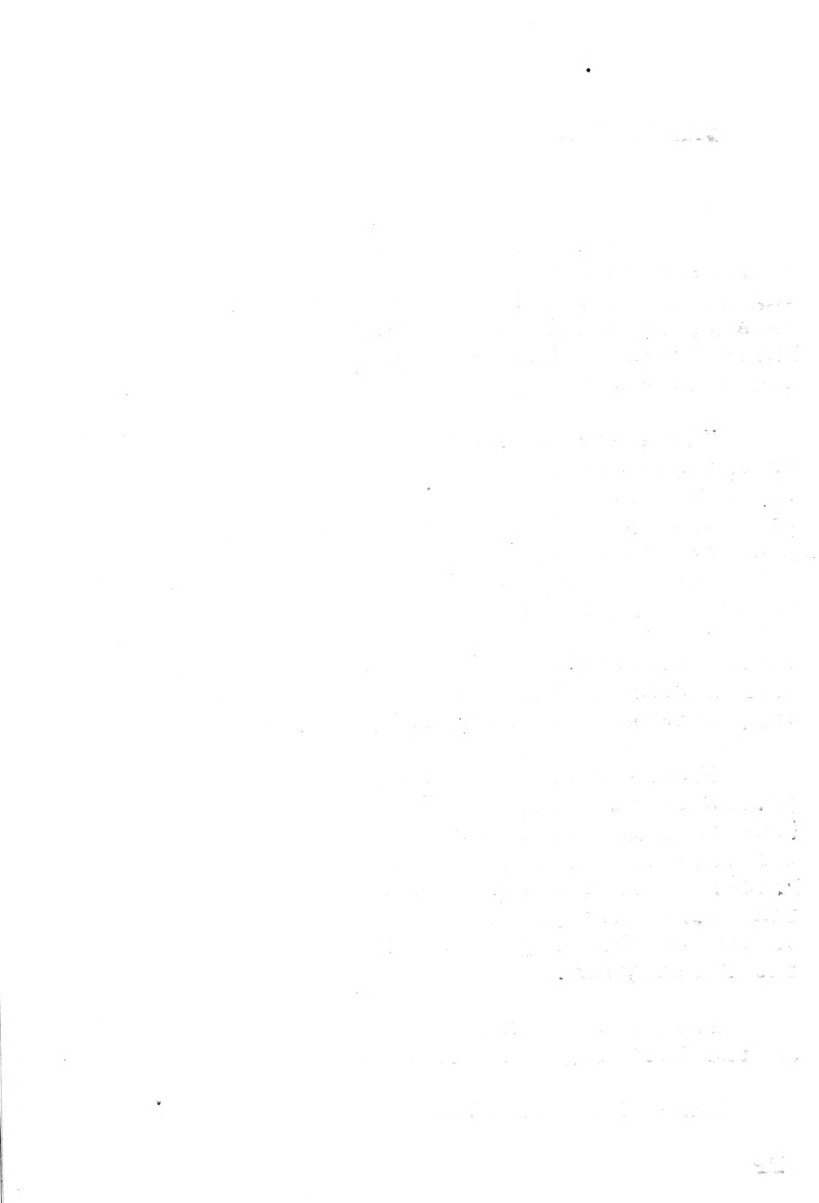
	1920	1910
Missouri,	5,162,000	14,359,000
Kansas,	1,508,000	6,929,000
Arkansas,	4,074,000	7,650,000
New York,	9,636,000	11,248,000
Pennsylvania,	6,981,000	8,000,000
Illinois,	5,116,000	9,900,000
Michigan,	5,583,000	7,534,000
Virginia,	7,385,000	7,004,000
Idaho,	2,380,000	1,005,000
Washington	7,964,000	3,009,000
Oregon,	3,315,000	2,029,000
California,	3,128,000	2,482,000

Pacific and mountain states have increased from 12,136,000 trees in 1910 to 21,204,000 in 1920. All other divisions of the country, except South Atlantic states show decreases. The largest decrease is in East and West North Central division comprising 12 states, which has 65,879,000 bearing trees in 1910 and only 34,918,000 in 1920.

—Kansas City Packer, July 2, 1921.







MEMORANDUM.

SPRING 1918

This catalog, issued last spring, was intended to serve for two years, supplemented by folders from time to time. The rapidly increasing costs have made some advances in prices necessary, particularly Apples, Peaches and Kansas Raspberries. Where the prices differ those in the folder govern, whether higher or lower.

These advances are slight and are subject to change. As more changes may be necessary in the next folder we suggest that orders be mailed promptly upon receipt of this catalog. If you are not ready for the stock right away you can have it reserved for later shipment. Another thing. Nursery stock is scarce this year. A number of varieties will be sold out before spring is over. Won't you tell us whether you wish a similar kind sent in case we are out of any, otherwise we must use our judgment.

Please examine particularly the special prices in the folder. Prices on Strawberries (inside pages of folder) are very reasonable, and this is a fruit that gives quick returns. Prices on Progressive are less than half what they were last year. This we consider the best of the everbearing strawberries, and it bears the first year.

Please also examine the "War Time Facts" on the last page of the folder.

KEEP THE CATALOG AND USE THE TWO COUPONS





